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NEW ZEALAND IN EVOLUTION

INDUSTRIAL, ECONOMIC, AND POLITICAL



LYTTELTON, THE PORT OF CHRISTCHURCH, SHOWING THE CRATERAL WALL THROUGH WHICH THE
TUNNEL RUNS.

NEW ZEALAND IN EVOLUTION

INDUSTRIAL, ECONOMIC
AND POLITICAL

By GUY H. SCHOLEFIELD

BOWEN AND MACMILLAN-BROWN PRIZE-
MAN, UNIVERSITY OF NEW ZEALAND

WITH AN INTRODUCTION BY
THE HON. W. PEMBER REEVES
DIRECTOR OF THE LONDON SCHOOL OF ECONOMICS

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1909

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To

MY MOTHER

MARION SCHOLEFIELD

INTRODUCTION

THE main business of colonists is to colonise ; and, where their history happens to be in the main one of peace and toil, the chief side of it is the narrative of the industrial development of their country. To the more picturesque aspects of the story of New Zealand some justice has been done elsewhere, and by more than one writer. The scenic beauty, the climate and fertility, the adventures of discoverers and pioneers, the racial struggles, the political experiments—of all these you may read in a score of books of some merit, to say nothing of many which have no merit whatever. But, so far, the evolution of our trade and industry have never been adequately examined, narrated in sequence, and summarised, at any rate in book form. A wealth of information on the subject is buried in official reports and statistics, in magazine articles, encyclopædias, and in journals, mainly colonial. But no full attempt to classify facts and weave them into a narrative, made interesting by reflection and deduction, has, to my knowledge, preceded this volume.

The industry of seventy years has multiplied a handful of pioneers, living on their capital and hopes, into a young nation of a million souls, with an oversea trade of thirty-six millions sterling. The three or four make-shift villages of 1840 are now represented by four substantial cities and a score of thriving little towns. Statesmanship, military courage, capacity for social organisation, have all had their share in making progress possible ; but the chief factor in the advancement of a mainly peaceful community has been steady and intelligent industry.

How often progress has been checked and effort apparently baffled by depression and disappointments certain passages of this book will show. The history of the production of food and raw material for the markets of the world during the last two generations has been chequered. Growers who would thrive and continue to thrive have had to cultivate initiative and be quick to adapt themselves to changing conditions. The fluctuations in the prices of wool, meat, and wheat have been in New Zealand's case thrown into the shade by the instability of the hemp market, and the ups and downs of gold-mining. The enterprise, scientific skill, and hopefulness needed to apply refrigeration, to build up a great trade in meat, cheese, and butter, were not small. Moreover, after seventy years, New Zealand is still mainly dependent on one great market, that of the Mother Country. Hostile tariffs have restricted the natural growth of her export trade to Australia and the United States. In England the door is open, and year by year New Zealand avails herself more and more of the wide though crowded entrance. But of all England's customers and purveyors our colony is geographically the most distant. She has to hold her own against competitors who have marked advantages over her in size and nearness to Europe, and sometimes therefore in their power of obtaining cheap money. How farmers, financiers, and politicians at the Antipodes have endeavoured, not without success, to cope with these disadvantages the writer of this book essays to show. How complete has been the abandonment of the doctrine of *laissez faire*, how close is the alliance of State and individual effort will be apparent in page after page. Whole chapters are necessarily taken up with reviews of statutes and departmental work designed to stimulate or regulate private industry.

If it be complained that the book is almost entirely concerned with pacific life and material things, the answer is that it is inevitably a story of development by peaceful labour. The story is worth telling. The author might

have chosen a romantic subject. He had a right to choose one useful and informing, and, having chosen it, to stick to his last. A New Zealand journalist of excellent standing, Mr. Scholefield has been well placed for many years to enable him to study the country and its settlers. It seems possible that these last are now to concern themselves more actively in Imperial affairs than has hitherto been the case—except during the fit of enthusiasm which caused them to outstrip even their own Government in the zeal with which they despatched mounted riflemen to serve against the Boers. But up to the present their record has been almost entirely written in the internal growth of their very prosperous and sanguine community. To one side of this growth the present volume will do justice to an extent not done by any previous writer. I have, therefore, no hesitation in recommending it to any systematic student of the life and affairs of an ambitious and successful young Dominion.

WILLIAM PEMBER REEVES.

October 10, 1909.

PREFACE

IN a mass of literature which makes New Zealand comparatively the best-described country in the world, there is not, I think, a single volume which purports to give a survey of its economic evolution. The bibliography of the last ten years—especially that portion which deals with sociology and labour—contains innumerable references to isolated aspects of New Zealand economy, but practically the only authoritative and intimate account of the development of social conditions appears in Mr. Reeves's book, "State Experiments in Australia and New Zealand."

The present volume is intended to give a conspectus of the subject, to trace the origin and growth of the social and industrial system of the Dominion and the operation of those laws by the enactment of which New Zealand has gained the title of the economic laboratory of the world. Whether these laws constitute an advanced form of Socialism, whether Socialism in this form is desirable or not, must be left to the student to judge. In his judgment he will probably not overlook the fact that the advanced democracy of New Zealand co-exists with a self-respecting passion of Imperialism so strong and spontaneous that it has more than once prompted the whole Empire to united action.

In describing the actuating reasons for the different measures referred to, I would not wish to force dogmas upon unwilling subjects further than to insist that every incident and every aspect of legislation in the New Zealand Parliament for the past quarter of a century—every tariff adjustment, indeed—was by intention and

design part and parcel of the great scheme of social reform upon which the country was engaged. Many had not been anticipated and had no apparent bearing on the scheme, but in their time they were just as essential as the main humanitarian acts which they were brought into being to support or reinforce. For instance, though a modified form of protection was essential to the establishment of industries and the increase of employment, the present fiscal tariff, which almost touches McKinleyism, was no part of the original scheme. Yet it cannot now be abandoned without the overthrow of some part of the fabric, and a consequent shock to the social well-being. The best friends of industrial arbitration to-day realise that the good offices of the customs tariff are necessary to its maintenance.

Critics are prone to the mistake that New Zealanders do not know that these social experiments and this fiscal protection are increasing the cost of living. In point of fact they do know it, and they tolerate it because they are willing to make sacrifices for the sake of preserving fair social conditions. All classes in New Zealand are in favour of arbitration, because it has immeasurably improved the condition of the workers and put decent limits to industrial competition. Practically all classes believe in a measure of protection, because they understand that without it certain industries cannot exist, and if they succumb there will be a relapse to the social condition of twenty years ago.

The present social system was not built up in accordance with accepted economic principles. It is a fabric of expedients, devised by practical men rather than scholars, to meet momentary and changing needs. Yet the Old World may insist that it be justified, not merely by its success, but by the measure of its conformity with the economic principles of the Old World. Since free trade is at present a dormant doctrine in the Australasian States, we may reasonably refer to the standards of an ardent free trader of the Victorian Colonising era. One

of the reservations of John Stuart Mill closely applies:—

“The only case in which, on mere principles of political economy, protecting duties can be defensible, is when they are imposed temporarily (especially in a young and rising nation) in hopes of naturalising a foreign industry, in itself perfectly suitable to the circumstances of the country.”

It might be argued that New Zealand has not advanced beyond the limits of this permission. But the conditions which Mill applies are important. He insists that any such protection shall be strictly limited in point of time, and that there shall be good ground of assurance that the industry so fostered will in course of time be able to dispense with protection. He would be a bold man who would promise the one or predict the other for New Zealand. At present any such hope is absolutely forbidden.

Though tariff protection was originally merely a circumstance in the general scheme, it has now become the keystone of those modest laws which are recovering the land from the monopolist and creating the finest yeomanry in the world, which have diffused education, capital, and wealth amongst the population, and have made the social conditions of New Zealand incomparably better than those of most other countries.

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For statistical information I am much indebted to the Hon. W. Hall-Jones (High Commissioner for New Zealand), Mr. W. C. Kensington, I.S.O. (Under-Secretary for Lands), and Mr. E. Tregear (Secretary for Labour); and for photographs for illustrations to Mr. T. E. Donne (Trade Representative for New Zealand, 13, Victoria Street, S.W.), and others.

GUY H. SCHOLEFIELD.

130, FLEET STREET, E.C.

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New Zealand in Evolution

CHAPTER I

"AO TEA ROA"—THE COUNTRY

The Britain of the South—An insular group—The mountain ranges—Features of the Southern Alps—The western fjords—Volcanic activity very restricted—Traces of ancient struggles—Valuable inland waterways—Irrigation and cultivation—Distribution of production—Wealth in rainfall—Temperature and sunshine.

IF Cook's motive as he scoured the boundless wastes of the Pacific had been to discover some new England, some replica of the land of his birth, he must surely have felt a triumphant satisfaction as he lay off the shores of *Te Ika a Maui* and *Tavai Pounamu*.¹ There are striking points of contrast, it is true, between the United Kingdom and the new Britain of the South, but the lines of parallel are much more marked. Cook noticed it immediately. Other pioneers emphasised it: and during all the long days of the colonisation it was the final solatium of the venturers as they left the Old Country that they were going at any rate to the Britain of the South. As to latitude, the most we can say is that both countries lie in the temperate zone: in longitude the correspondence is much more accurate.² In its archipelagic character New Zealand

¹ The native names of the North and South Islands respectively are *Te Ika a Maui* (The Fish of Maui) and *Te Iwai Pounamu* (The Waters of Greenstone).

² The Antipodes, one of the outlying groups of New Zealand, are the nearest land surface directly opposite in latitude and longitude to London.

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closely resembles the United Kingdom ; there are two main islands and a host of smaller. The area coincides roughly ; that of New Zealand is one-seventh less.

NEW ZEALAND.			UNITED KINGDOM.		
		Sq. miles.			Sq. miles.
North Island	...	44,468	England	...	58,311
South Island	...	58,525	Scotland	...	30,463
Stewart Islands	...	665	Ireland	...	32,531
Outlying islands...		1,093			
<hr/>			<hr/>		
Total	...	104,751	Total	...	121,305

But New Zealand is, in reality, much more insular than either England or Japan. The British Isles and those of the maritime allies of the East both lie adjacent to the largest land area on the globe, while New Zealand is surrounded by the widest expanse of water. There is an uninterrupted moat twelve hundred miles in width at its narrowest part, between New Zealand and Australia. Southward two thousand miles of deep sea separates it from the Antarctic ice-pack ; westward the great range of the Andes is four thousand miles distant ; and northward the full sweep of the Pacific is only broken by inconsiderable archipelagoes until it beats on the shores of Japan and Alaska.

Upon this vast expanse of ocean one hundred thousand miles of land looks no larger than a cluster of gems. Far-flung, too, are the outlying islands which are the complement of the main cluster. The Chathams, a group of romantic legend, lie 530 miles east of Lyttelton ; the Kermadecs are five hundred miles north of the ultimate spot whence the Siberian godwits and the spirits of the departed Maori leave on their long migration. A thousand miles in the hazy offing they pass the last link of New Zealand that bejewels the ocean, the beautiful Cook Islands. Far to the south again the trackless ocean to the polar ice is studded with New Zealand outposts, the depôts for castaways and sealers at the Aucklands and Campbell Islands.

The mountain ridge of New Zealand, resembling the

backbone of a fish, lies north and south, and is supposed to have some subterranean connection through the polar regions with the Andes of South America. In the flora of the two countries there is some strange evidence of an affinity. In the extreme north of New Zealand, apparently of more recent formation, the mountain chain is comparatively low, except for occasional clusters of towering volcanoes which interrupt the contour. Some of them reach 9,000 feet in height, and are only connected by chains of low foothills, which rarely, even in the severest seasons, aspire to the snowline. It can scarcely be tolerated by science, but Maori legend has the fantastic story that Mount Egmont, the lonely and beautifully symmetrical peak which starts up out of the Taranaki “bush,”¹ was once an intimate fellow of Tongariro and Ruapehu, and that a quarrel over the love of a neighbouring lady mountain led to his flight to his present position, one hundred miles distant. South of the volcanic zone of the North Island a rugged range from the East Cape converges, and the two go hand-in-hand to the sea, appearing again in the South Island in a much better defined ridge. In general the Southern Alps lie well above the summer snowline, and from the perpetually ice-bound fastnesses a school of peaks rise majestically to upwards of 10,000 feet. The mountain chain is continuous and unbroken, and throughout its entire length is only crossed by passable tracks at two points. It lies closer to the west coast than to the east, and, robbing the westerly winds of their moisture, precipitates a heavy rainfall upon a narrow but extremely fertile strip of country on the western side. On the east, too, numerous full-bodied rivers are kept hurrying down to the ocean by the rains and the ever-melting snows.

The line of perpetual snow lies at from 6,000 to 7,000 feet above sea-level, so that winter and summer the settlers of Westland and Canterbury, who in the early days were in one political province, are separated

¹ The term generally used in the colonies to denote forest.

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by a glittering ice-bound rampart gloomily escarped by the bush-clad foothills.¹ The Alps sharply differentiate the climate. On the west, where the rain-laden winds from the Tasman Sea strike the icy face of the mountains, there is an annual rainfall of upwards of 100 inches. The bush is dense and the vegetation rank, and even in the heat of summer the air is inclined to be humid. If Westland did not abound in mineral wealth it would still, with its luxurious pastures, be a prolific dairying district. A spell of warm weather brings down floods of snow-water in place of rain, and the rivers are rarely low. Glaciers of immense extent creep down with imperceptible motion to within 800 feet of sea-level before they succumb to the warmth of the earth and the sun.²

On the east how different! Here the flanks of the mountains descend less abruptly through ranks of brown foothills and wide plains shelving gradually to the sea, 50 to 80 miles distant. Everything is alike tempered and graded. There is no glaciation below 2,500 feet; the rainfall is very light, less than one-fourth that of Westland. There are vast areas of plains and downs, increasing in richness, from the healthy grazing foothills to the deep black wheat-growing land along the coast-line and in the valleys of the rivers. A dozen rivers fed by snow rush tempestuously down the inclines of the Alps, tearing away vast quantities of detritus, and rubbing and rounding the stones with subtle skill to fertilise the alluvial flats lower down. Many of the river-beds are of inordinate width, and the local governing bodies have to exercise constant vigilance to check the growth of noxious scrub and prevent the streams in their freshets from striking new courses. Thus bountifully supplied by nature, Canterbury is able to water almost every acre

¹ Mount Cook itself (Aorangi), 12,349 feet, is the highest mountain in Australasia. It lies actually to the east of the main range. In its neighbourhood are ten other peaks exceeding 10,000 feet. The only pass in the Alps that is crossed by a road is 5,359 feet in height.

² The Tasman Glacier, the largest in the world, is 18 miles in length, with an average width of 1½ miles, and an area of 14,000 acres.



THE FRANZ JOSEF GLACIER, WESTLAND, FROM A POINT ONLY 692 FEET ABOVE SEA-LEVEL.

of land, and to produce more from her acres than any other province.

Entering the province of Otago, the Alps become lower and less clearly defined. In the west they extend to the water's edge, and are indented by innumerable arms of the sea, into which the cliffs drop sheer to an unfathomable depth. The whole of the western coast-line of Otago is broken up into irregular fjords and sounds more rugged and beautiful even than those of Norway. Here, in the earliest days, Cook, Bampton, and a score of navigators and adventurers made haven for their vessels, whose yards scraped the towering cliffs in perfect security from the swell of the Antarctic raging without. As scenic spots the sounds and fjords of Otago are unsurpassed. Economically they are almost useless owing to the rugged nature of the adjacent country, which cuts off the rich grazing and grain-growing lands of the interior from the seaboard. The railways all lead to less remarkable harbours on the eastern seaboard.

Perhaps a fourth of the total area of Otago will never be brought into cultivation, but in its natural state it will still exercise an important influence on the climate of the province, conserving the rainfall and the timber supplies, and affording a tremendous supply of energy for industries. In the centre of the province, the semi-mountainous regions of Wakatipu and Tuapeka, valuable gold deposits, discovered nearly fifty years ago, still add enormously to the wealth of Otago.

Volcanoes and earthquakes, with which in the mind of the general reader the name of New Zealand is fearfully associated, have long since ceased to have any terrors for the New Zealander himself. As a matter of fact, the active volcanic forces which formerly played in New Zealand have long since become dormant, and generally the volcanoes of old have earned the blessing of the *pakeha*¹ by providing some of the most excellent natural harbours in the world. The fine, deep bays on Banks Peninsula, Otago Peninsula, and in the Marlborough

¹ The white men, literally strangers.

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Sounds, the splendid harbour of Wellington, and the beautiful land-locked bays of Auckland, are chiefly traceable in their origin to the volcanoes of pre-*pakeha* and, indeed, of prehistoric, days. New Zealand is admittedly a land of comparatively recent formation, but even the Maori and the *tangata whenua*¹ before them, whose joint traditions extend back to about the eighth century A.D., preserve no records of a volcanic activity more terrible than the whites have experienced since their arrival. There is really only one active volcano on the mainland, the peak of Ngauruhoe, and all evidence of still extant activity is confined to a belt of country extending from that peak in a north-easterly direction to the shores of the Bay of Plenty, and thence under the sea to Whale Island and White Island in the bay. Ngauruhoe (7,515 feet) is the highest of the group of volcanic cones known as Tongariro. It is the only active peak on the mainland, and its worst activity within living memory was a discharge of lava in 1868, repeated in the beginning of the present year (1909). The clouds of steam which rise regularly from this crater, and periodically from a crateral lake on the summit of Ruapehu (9,008 feet) are regarded by the inhabitants of the neighbourhood as the safety valves which make serious eruptions unlikely. So long ago as 1858 Hochstetter declared Ngauruhoe and White Island (a cone rising to a height of 863 feet out of the sea) to be the only active volcanoes in New Zealand, and nothing has since occurred to impugn this statement. The solitary cone of Egmont, before referred to, is one of the most perfect in the world. It has never been active within historic times. Along the volcanic line from Ngauruhoe to the Bay of Plenty the crust of the earth is extremely thin, and is perforated in numerous localities by hot springs, geysers, boiling mudpools, solfataras, and fumaroles. In the larger depressions is a chain of beautiful fresh-water lakes, about which the primeval bush grows in all its brilliancy and luxuriance. This is a region of wonders

¹ The original inhabitants : autochthones.

and unsurpassed beauties. Here and there the dark, trackless forest comes abruptly to an end in the light of day, and a wide splash of stunted scrub, fern, or tussac grass indicates the pristine devastation of an eruptive volcano.

Here again the strata of the soil exhibit the extraordinary convulsive struggles of former days. The excavations for the North Island Main Trunk Railway, where it passes round the base of the old volcanoes, showed remarkable traces of the upheavals that had occurred in the olden days, before the crust of the earth in this spot cooled and permanently hardened. Marine shells and clay alternate with layers of dry-laid pumice dust from the furious craters of old, tangled here and there by the explosion of some new force from below or the descent of a shower of immense basaltic boulders hurled up from the bowels of the earth and tossed broadcast by the force of the explosion. Over a wide area surrounding the volcanic group—the plains of Kaingaroa, Murimutu, and Waimarino—low scrub and fern have struggled up through a thick deposit of pumice dust, laid some hundreds of years ago, perhaps, by the last gasping outbursts of the giants. The most recent eruption was that of Mount Tarawera, in 1886, when a hot lava stream overwhelmed some native villages with great loss of life and destroyed the beautiful pink and white terraces which had been formed in many generations of hydro-thermal action.

The city of Auckland stands to-day upon a cluster of volcanoes long extinct. In the city and its suburbs are evidences of the former existence of “no less than sixty-three points of eruption, which render the narrow isthmus a truly classical soil for the study of volcanic formations.” This and the zone further north have been so long extinct that when the white men arrived there were not the slightest traces, in the form of stunted flora, of former activity. The South Island is apparently of greater antiquity than the North. It has no volcanoes whatever, though in parts the formation is distinctly of that character.

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New Zealand's volcanoes are interesting purely as a study of the past. They have no importance except as an attraction to tourists, and are not allowed to interfere in the least with the development of the country. By a liberal computation the volcanic and hydro-thermal region does not exceed 4,200 square miles, or 4 per cent. of the total area of the Dominion. Within this area there is already a large white population, and the land is rapidly being brought into such cultivation as it is suited for.

The old fear of earthquakes has also died a natural death. When the white people first settled at Wellington in 1840 they constructed their houses of wood, for the simple reason that it was the only material available. In 1855, before the ordinary period for rebuilding arrived, the settlement was rather severely shaken, and the coast-line was raised a few feet. This shock really conferred considerable benefits on the colonists, but its memory warned them not to build in brick or stone. Consequently Wellington was—and still is to a large extent—constructed in wood. But the old fear is now dead, and to-day the bulk of the business portion of the city is handsomely built in concrete and reinforced concrete. Earthquakes are still more frequent than in England, but severe shocks are of rare occurrence.

Possibly there is no country in the world more favoured than New Zealand in the distribution of its waterways. With a length over all of 1,000 miles, the islands are nowhere more than 200 miles in width, and the actual coastline is 4,000 miles in length. The best natural harbours are all on the east coast, the landlocked bays of Wellington, Lyttelton, Otago, Akaroa and Picton, Auckland, and the Bay of Islands. For the South Island this is a happy dispensation, since the great areas of producing land, both agricultural and pastoral, all lie towards that coast. Finer, perhaps, than any of these ports are the deep indentations of West Otago, which, however, have little economic value. The west coast harbours otherwise are generally poor, the bar-bound



MOUNT TONGARIRO, SHOWING THE RED CRATER, NGAURUHOE AND RUAPEHU.

mouths of the rivers or badly sheltered roadsteads. In the South Island the area that is so inconvenienced is inconsiderable, but in the North the difficulty is greater, since large producing areas lie towards the west coast, and the lack of natural outlets is a distinct drawback. It has entailed great expenditure in the construction of artificial harbours and the improvement of the existing roads and estuaries.

In respect to inland waterways New Zealand is remarkably wealthy. The North Island is penetrated right to its heart by four great navigable rivers—the Waikato, the Whanganui, the Manawatu, and the Rangitaiki—having a combined watershed of 11,165 square miles and an estimated discharge of 2,220,000 cubic feet per minute. The Waikato is navigable for small craft for from 75 to 100 miles, the Whanganui for 150 miles, and the Manawatu for 40. The Rangitaiki is as yet little used for navigation. Of a number of rivers in the North Auckland peninsula the winding Wairoa carries ocean-going ships 40 miles from its mouth and smaller vessels for another 50. A large portion of the seaborne timber trade of the north plies out of this river. Out of a host of other rivers in the North Island, there are only about half a dozen which do not hurry down to the sea at too great a speed to be navigable.

The South Island boasts the largest river in New Zealand, the Clutha, or Matau, whose discharge for the year is only slightly exceeded by that of the Nile. The Clutha takes its rise 220 miles from the sea, and has a catchment of 8,248 square miles. In spite of a swift current it is navigated for 40 miles. A neighbouring and more sluggish stream, the Taieri, is navigated for a short distance. Of the succession of mountain streams that tear their way from the Southern Alps eastward to the sea only one, the Waimakariri, is navigated, and it gives waterway to the flourishing town of Kaiapoi. Several of the streams on the westward slope carry more water than those of the North Island, but their treacherous currents forbid navigation, except up to the harbours which have

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been formed on the estuaries. Partly because the roads and railways tap the country, but chiefly because the population is small, the inland waterways of New Zealand are not yet developed to any extent. Their chief and inestimable value for such a country is that they furnish a never-failing water supply at all seasons, so that farmers can embark with absolute confidence upon any branch of agriculture or stock-raising. Here and there, in the natural distribution of the water, there is a serious summer desiccation of the soil, but this has been remedied inexpensively by a system of surface irrigation, which prevents the water reaching the ocean by too direct a course without a thorough distribution.

By reason of its configuration and the rugged, mountainous character of the interior, the South Island has a large proportion of waste land. Practically one-fifth of the whole area will never be brought under cultivation or used for pasture, and about one-third will be suitable only for pasturage. But the natural features of the unused portion are mainly responsible for the great productiveness of the used. Without the great reservoir of natural climatic resources which is provided by the mountain range of the South Island, it would be impossible for the cultivable area to produce nearly so abundantly as it does. The black alluvial soil of the Taieri, the Clutha, the Waimakariri, and other river valleys, yields bounteously year after year under a rotation of crops. The bulk of the actual cropping is done on the plains and downs of Otago, Canterbury, and Marlborough, and in the whole granary of Australasia the heaviest crops of wheat, oats, and barley are obtained in the paddocks of New Zealand. Any crop that is grown in temperate climes may be grown to perfection in New Zealand, while the northern latitudes produce excellent maize, oranges, lemons, and semi-tropical fruits. The latitude of the South Island corresponds with that of Spain and the South of France. Generally speaking, the farming zones are close to the railway lines, the hinterland being devoted to grazing and pioneering, with its concomitant

industry, saw-milling. In the centre of Otago a large population is fixed to the soil by gold-mining, which extends down the courses of the principal rivers, giving place near the coast-line to coal-mining. In Canterbury practically the whole of the land is given up to sheep-raising and cropping, with here and there a dash of dairy-farming. Marlborough, too, grazes large flocks on the foothills of the great Kaikoura range, turning the fertile river-beds to account in the cultivation of barley and in dairying, while the densely wooded sounds produce large quantities of timber. Nelson is similarly engaged. Westland, though primarily concerned in the raising of coal and gold-mining, turns her forest lands to good account in the production of timber, and later, of dairy produce.

The South Island is, if anything, more self-contained than the North, where certain phases of producing are necessarily neglected. In the North the proportion of land which is practically useless is very small, not more than 5 per cent. of the total area. At the same time there are large areas in the centre of the island surrounding the volcanic zone, which, being covered with pumice, can only be regarded as of inferior quality, and will not carry the same quantity of stock as other parts. Otherwise these areas are perfectly healthy. The North Island was for the most part covered with dense bush, the borders of which have gradually receded from the confines of close settlement. At the present moment the saw-milling industry is thriving on the outskirts of a forest which extends with little intermission from the Taranaki province right through to the east coast at East Cape and Castlepoint, and northwards to the Bay of Plenty. In the north of Auckland, too, the immense pristine forests of *kauri* are steadily giving place to cultivation and the subsidiary industry of gum-digging. Just south of the city of Auckland, on the vestiges of the older volcanic deposits, is a wide expanse of beautiful downs. South of this the long belt of the Waikato country is generally of poorer quality, but is retrieved from the status of scrub-

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land by the presence of valuable coal deposits. These extend through the grazing lands of the King country and thence into the forests of the Taranaki province, which again, further south, have given place to a wide extent of the most fertile downs in New Zealand, the famous dairying country of Taranaki.

Along the Whanganui bight dairying is less intense, but it thrives again on the rich alluvial terraces of the Manawatu and its hinterland. Another strong centre of the industry is the belt of country, formerly bush, which lies between the provinces of Wellington and Hawke's Bay. Here, where the old Seventy Mile Bush stood in the path between Wellington and the plains of Hawke's Bay, a copious rainfall produces luscious grass in the "clearings." Northward, in Hawke's Bay, is one of the wealthiest grazing districts in the Dominion, with alluvial flats of fabulous fertility. Southward the land opens out into the lighter plains of Wairarapa, where sheep-raising thrived long before the settlers made bold to attack the summer desiccation by irrigation. Gradually the growth of population and the construction of surface channels is relieving this difficulty. The Wairarapa has no port nearer than Wellington, which lies across a steep mountain range. Hawke's Bay, the home of the graziers, ships from an open roadstead at Napier the produce of the finest flocks and herds in the Dominion.

A feature of the North Island which adds greatly to its productiveness is a wide belt of ancient marine deposit (*papa*),¹ which coincides roughly with the remains of the inland forest as stated above. Wherever this occurs the settler rejoices. *Papa* country produces the readiest crops of grass, and carries a payable quantity of stock both winter and summer.

In considering the producing capabilities of a country, climate and rainfall can scarcely be placed second even

¹ *Papa* sometimes contains as much as 30 per cent. of lime. When first exposed to the air it closely resembles blue slate, but disintegration is rapid, and in a few months a solid *papa* face will be covered with rich grass.

to the fertility of the soil itself. Many of the drought-stricken parts of Australia possess soil which, allied with a requisite amount of rainfall, would produce enormous wealth. Apparently poor soils, on the other hand, would often be sweetened by a fair amount of sunshine. To the earliest explorers, even amongst the Polynesians, New Zealand seemed to be a country pre-eminently wealthy in respect to the twin considerations of soil and climate. Lying in a latitude which varies from that of Morocco to that of the middle of France, and surrounded by a vast expanse of water, New Zealand in the north can grow grapes in the open air and ripen maize and oranges, while in the south the winter frosts and snows absolutely arrest growth. There are all degrees of temperature, from the genial warmth of Devonshire to the sub-tropical heat of Egypt. In the whole of the North Island it is rarely necessary to house stock at night. In Auckland the mean temperature ranges from 51·4 degrees in July (the coldest month of the year) to 66·6 in the midsummer heat of January, the variation being a great deal less than at either Naples or London. The mean temperature for the year is 55·4 degrees in the North Island and 51·8 in the South. Even in the extreme south the diurnal range for the year is only 16·5 degrees.

Rain falls on an average on 166 days in the year at Wellington, on 122 days at Christchurch (where the Southern Alps have robbed the winds of their moisture) and on 177 days at Hokitika, on the western side of the Alps. The average fall for the year is 41·68 inches at Auckland, 25·16 inches at Christchurch, and as much as 115·59 at Hokitika. Sunshine, the main requirement of a well-watered country, is abundant. Observations taken in Hawke's Bay registered 2,692 hours in a year, or 62 per cent. of the possible duration. In Canterbury for the same period the sunshine extended to 2,133 hours. The average in the southern part of the British Isles is 1,600 hours (36 per cent.) and in Italy from 2,000 to 2,400 hours (45 to 54 per cent.).

CHAPTER II

THE FIGHT FOR BRITISH SOVEREIGNTY

Discovery by Tasman—The tragedy of Murderers' Bay—The great southern continent—Captain Cook's explorations—De Surville and Marion du Fresne—Whalers and traders—The Mission at Bay of Islands—Fighting for British sovereignty—Mr. Busby appointed Resident at Bay of Islands—The Declaration of Independence—Edward Gibbon Wakefield and the New Zealand Company—Opposition of the Colonial Office—Sailing of the *Tory*—A Lieutenant-Governor appointed—The "accidental" colony—Treaty of Waitangi—Conflict with the New Zealand Company—Death of Governor Hobson—Wakefield's triumph—Responsible Government.

WHILE William the Conqueror was making the passage of the Channel for the conquest of England, the Maori people were the first navigators of the world. North to the Sandwich Islands, east to Tahiti, south to the very fringe of the Antarctic ice-pack, the Polynesian seamen pushed their adventurous prows. The Pacific was their own sea. It was rudely charted, and the frail double canoes put forth fearlessly on voyages as long, occasionally, as from Queenstown to Sandy Hook. But peace and luxury succeeded to the ardours of those pioneering days : the voyages became shorter and less frequent, and after the middle of the fourteenth century the different branches of the Polynesian race remained secluded within their own island borders.

There is small reason to believe that Abel Janz Tasman was not the first adventurer from the outside world to break in upon their seclusion. Vaguely founded suggestions on behalf of Spanish and Portuguese navigators have failed to rob the demure, intrepid Dutchman of the credit. Though not infallible, the legendary lore of the

Maori is usually too distinct to omit such an event as the appearance of the huge seabirds which brought the pale-skinned men from the other world. Nor, on the other hand, would the archives of the great maritime nations of Europe have failed to record such a triumph. Both Tasman and Cook were greatly impressed by the Maori and their country. The Maori were too distinctive a race to have escaped special notice amongst the Kaffirs, the Tasmanians, and the Australian blacks.

Eastward from his latest discovery, "Van Dieman's Land," Tasman had been sailing drearily over the sea that now bears his name, in search of the great southern continent which had become the visionary goal of all the navigators of his time. The fact that he had already coasted along the southern seaboard of Australia did not destroy all hope of finding something still more immense. On December 13, 1642, his hopes were raised by the appearance, right ahead, of the sombre, surf-beaten coast of the South Island of New Zealand, with rising ground in the interior. His expectations were tragically disappointed. Cruising cautiously northwards, the *Hcenskirk* and the *Zeehaan* turned into the large bay at the northern end of the island. Here for the first time natives were seen, and the ships anchored close inshore in the hope of opening up trading relations with them. The Maori canoes, fully manned and armed, paddled inquisitively about, but refused to hold intercourse, and the lowering of a boat from the *Zeehaan* was the signal for a furious onslaught by the natives. Three of the Dutchmen were killed outright and one mortally wounded; and the Maori, avoiding the fire which the vessels opened upon them, escaped with the body of one of their victims.

Tasman left behind him the title of Murderers' Bay, and could hardly find the courage to continue his investigations of such an inhospitable land. Still faintly hoping that he had found the great southern continent, he called it "Staten Land" (after the States-General of Holland), in the belief that it might extend across to the

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recently discovered island of the same name off the coast of South America. His attempt to pass eastward through what is now known as Cook's Strait was baffled by adverse winds. Sailing up the coast past Cape Egmont, Tasman discovered and named the Three Kings. The heavy surf and the sight of some very tall persons armed with staves and speaking in loud, harsh voices, discouraged his desire to obtain water, and the Dutch expedition said farewell to "Staten Land." The insular character of the South American discovery of the same name was ascertained almost before Tasman's achievements were known in Europe, and the States-General then gave the name "New Zealand" to Tasman's land.

About the thoroughness of the period of isolation which followed Tasman's appearance in New Zealand there is no speculation. It was absolute. Spain, Portugal, and Holland fell away from the spirit of enterprise which had marked their domination of the seas, and the Polynesians themselves now stayed severely at home.

The name for which the British race has been most universally revered throughout the Pacific is that of Captain James Cook, whose three voyages of discovery put the coping-stone to the story of British maritime enterprise. The high personal qualities, the humanity and integrity of the man himself, were no less remarkable than the unfailing courage and the consistent thoroughness of his work. On October 7, 1769, Cook first sighted New Zealand. Nicholas Young, the ship's boy after whom "Young Nick's Head" was named, was the first white man to see New Zealand from the eastward. Cook, too, more practised than Tasman in intercourse with native races, could not avoid a conflict with the barbarous inhabitants. The safety of his own men had perforce to override his reluctance to shed blood on his first meeting with the Maori, and on three successive days the Englishmen fired on small parties of the natives, each time with some casualties. For the last conflict he had not the same justification, and Cook always looked



MOUNT COOK, THE HIGHEST PEAK IN NEW ZEALAND, 12,349 FT.

Hooker River in the foreground.

back on the incident with keen regret. Observing two canoes crossing the bay (which he named Poverty Bay on account of his failure to obtain supplies), he determined to intercept them and win the goodwill of the natives by means of presents. The Maori did not stop when called upon, and replied to a musket-shot which was fired over them by seizing their weapons and fiercely attacking one of the boats. In the combat several of them were killed, but some who jumped overboard were captured and well treated. In his subsequent intercourse with the natives Cook was fortunate enough to avoid further conflict. He observed a transit of Mercury at the Bay so called (in the Coromandel Peninsula), and there, on November 15, 1769, he took possession of the North Island of New Zealand for King George III.

Just a month later Cook missed by the merest chance meeting one of the most famous of the French navigators, M. de Surville. The *St. Jean Baptiste* first sighted New Zealand on December 12th, and the same storm which prevented de Surville from coming to an anchor until the 17th also drove Cook off the coast for the first time since he touched it. The *Endeavour* was overhauled at Ship Cove, Queen Charlotte Sound, and here, on January 30, 1770, Cook took possession of the South Island also for the King of England. Having circumnavigated both islands, he finally departed on March 31st from near the spot where Tasman had his fatal encounter.

Meanwhile de Surville cruised about in the north. According to the accounts which have been handed down, he was guilty of a grievous outrage in burning a village and kidnapping a chief who had shown conspicuous kindness to some of his invalid sailors. The *utu*¹ due for such an insult was wreaked two short years later with terrible ruthlessness upon the expedition of Marion du Fresne. The commander and a boat's crew who were at work ashore were attacked, overpowered and eaten. Only the coolness of the lieutenant, Crozet

¹ Revenge.

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saved the other shore parties and rescued the ships, the *Mascarin* and *Marquis de Castries*, from a perilous position. Crozet, too, ignorant of what Cook had done, took possession of the North Island for the French, under the name of "France Australe." The ill-fated *La Perouse* was making for New Zealand when he was last heard of, and the relief expedition under D'Entrecasteaux was on the coast for a short time in 1793.

Year by year New Zealand became better known. Ships of the Royal Navy which had convoyed transports to Australia made a practice of calling at the northern ports to obtain spars from the magnificent pine forests. Close upon the heels of the explorers came whalers and traders from the Old World, New England, U.S.A., and Australia. The natives learned the value of timber, flax (*Phormium tenax*), and preserved human heads, and the *pakeha* saw a prospective value in the vast tracts of grassland and forest. The Bay of Islands became a busy emporium, frequented by lawless, adventurous, loose-living, but not entirely unworthy men. They were the real pioneers of civilisation. It was through them and the perils they faced that the savage Maori first learned the advantages of trade and civilisation. White men lived with Maori wives, and were eagerly sought for by the tribes as agents for increasing their power and prestige amongst their rivals. Gradually settlements of free *pakeha* were formed at the more frequented spots. Escaped convicts drifted across from New South Wales, and even they were assets of value to the Maori tribes, all anxious to acquire new crafts.

So well did these irregular pioneers open the field that Samuel Marsden, the chaplain to the colony of New South Wales, was able in 1814 to establish tranquilly a Church of England mission at the Bay of Islands. Cook had given pigs and potatoes to the natives; Marsden brought horses, cattle, poultry, and wheat. And it cannot be gainsaid that these were factors at least as potent as the Gospel in uplifting the Maori from the degraded condition of barbarism in which Cook

discovered them. The transition was a slow one, and it was attended by many sad lapses. One of many shocking reactionaries was Hongi, the great Ngapuhi chief who visited England in 1820. Fêted everywhere, and much benefited, it was thought, by what he had seen, he was sent home laden with presents. These he astutely converted at Port Jackson into a species of currency much more highly valued amongst his countrymen—muskets and ammunition—and thence onward till his death in 1828 a bloody warfare ravaged the northern tribes. The feuds which he aroused were not set at rest until British authority was firmly established.

Until the jurisdiction of the New South Wales courts was extended to New Zealand, in 1828, the lawlessness of the white settlers went unpunished. Even then justice was a mere figure of speech, and the position was in no wise improved by the casual visits of British warships. Although importuned on all sides—by the Maori desiring protection from the outrages of the *pakeha*; by the *pakeha* fearing the sovereignty of France—the British Government set its face steadfastly against the proclamation of New Zealand as a British colony. The position was little short of a scandal. Cook for England and Crozet for France had taken possession of the country. France had by treaty recognised the sovereignty of England; New Zealand had naturally become an appanage of New South Wales, and the resort of hundreds of British settlers, some outlaws of the worst description, others esteemed and law-abiding citizens. The Maori themselves had petitioned for protection against the warfare, rapine, and licentiousness that were rampant. Again France turned covetous eyes towards the country. Still England withheld action, denying the protection and the liberty of the British flag.

There are only two pleas that can be entertained in extenuation of the action of the Imperial Government. England had not yet learned the art of colonisation, and made no secret of her objection to any further extension of the boundaries of the Empire. In the second place,

the missionaries, for reasons which we dare not impugn, strongly disapproved the introduction of British sovereignty. One English expedition which had attempted to colonise the north in 1825 fled in dismay at the sight of a Maori dance. The condition of the country was deplorable. War raged on all sides. There was not sufficient public opinion amongst the Maori to unite any two tribes, and the petition of thirteen chiefs for the protection of King William was merely the outcome of a patriotic and timely project on the part of the better class of *pakeha* to anticipate a French occupation by the proclamation of British sovereignty. Jealously desirous of avoiding such a possibility, but determined still to have nothing to do with such a hornet's nest, the Colonial Office maintained its neutrality by sending James Busby, a civil engineer practising in New South Wales, to establish himself as "British Consul" at Bay of Islands. He was carefully denied the customary authority, and no military escort was detailed to ensure him a reasonable chance of surviving the alarms which annually threatened the settlement. In peace Busby was something in the nature of a harbourmaster, to clear and enter British ships; in war his voice was that of a prophet crying in the wilderness. He was as powerful and as useful as the limitations of his authority permitted. When a French faddist, the Baron Charles de Thierry, threatened to establish a kingdom in his own person on a tract of land which he had commissioned one of Marsden's catechists to purchase for him, Busby was too patriotic to rest inactive or to be bound by his own very limited powers. He was determined not to let the country go by any default of his to France. Knowing full well that the Imperial Government was not kindly disposed towards New Zealand, and fearing to delay while he consulted his own immediate chief, the Governor of New South Wales, he took upon himself a responsibility which he had exercised in a minor and harmless manner in the previous year.

All the chiefs within reach were summoned to a meet-

ing at his residence at Waitangi, where on October 28, 1835, they signed a document declaring their country an independent State under the designation of "The United Tribes of New Zealand," and signifying their willingness to grant protection and facilities to any British subjects who desired to resort to New Zealand for the purpose of trade. De Thierry's project fell to the ground for the fundamental reason that his purchase of land was only valid to a small extent, and his subjects were only too glad to take service in the dockyard of Lieutenant McDonnell, who had been appointed an additional British Resident. This gave the Governor of New South Wales an opening to reprimand Busby for exceeding his authority and perpetrating what he called a "silly and unauthorised act" and "a paper pellet."

But there were now other powerful forces at work in England to compel the Colonial Office to take responsibility for the good government of New Zealand. Edward Gibbon Wakefield, the prophet and genius of colonisation, had just withdrawn from the South Australian Association, an organisation which in face of the stubborn opposition of the Government had courageously embarked its private resources in the enterprise of founding systematically a new colony in Australia. Before a parliamentary committee he complained of the "slovenly, scrambling, and disgraceful manner" in which New Zealand was being colonised. "The country," he said, "is one of the finest in the world, if not the finest, for British settlement."

In 1837 he had a scheme afoot for the proper settlement of the new country, and from that moment the reluctance of the British Government to take control developed into a furious and at times bitter conflict of wits with the directors of the New Zealand Company. There can be no doubt that the objections to British sovereignty in New Zealand were greatly aggravated in the official mind by the importunities of the Company.

A Select Committee in 1838 adduced ample evidence of the moral obligation that lay with England to step in

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and curb the licentiousness of British subjects, to hold the scales of justice evenly between them and the natives, and to check the devastating career of those Maori tyrants who, having acquired arms and ammunition from unprincipled traders, kept all the tribes in a constant state of fear. The nation which had felt the regeneration of Europe from the tyranny of Napoleon to be a duty could not possibly repudiate its obvious responsibility in this less important sphere. But the British Empire has truly been described as an "accidental" empire. Almost every important move towards the present great achievement has been the unauthorised act of some far-seeing pioneer, and many a bold patriot has merited the reprimand of the central authority which he has pledged to some line of public policy. Nowhere was the building up of the Empire more strenuously opposed by the Imperial Government than in the Australasian colonies.

Imbued with the highest ideals, the directors of the New Zealand Company originally decided that no member should have any pecuniary interest in the object in view. It was to be a chartered company responsible to Parliament. But, strangely enough, this was exactly the feature that attracted the suspicion and disapproval of the Government. Lord Glenelg wanted the Association to form itself into a limited liability company. The Association refused point-blank to do so and antagonised the Government by trying to get a Bill through Parliament sanctioning its own scheme. When this was rejected the idealists were compelled to fall in with the desires of the Government, but before the Company could be financed a change of Government took place and the next application for a charter for the Company was curtly met with the intimation that as the directors had once refused to comply with the conditions laid down the Government could not deal further with them.

Meanwhile, those who were interested in New Zealand, both at home and at the Antipodes, were much agitated by the activity of the French explorers and by certain



PART OF AUCKLAND, SHOWING THE HARBOUR AND MOUNT RANGITOTO.

"purchases" which were claimed to have been made of the natives by French subjects. By the middle of 1839 definite assurances reached England of the organisation of a French company for the colonisation of the group. The New Zealand Company bombarded the Government with warnings of what would occur and urged the proclamation of British authority. Still the Colonial Office withheld action. At length, though still without a charter, the Company boldly intimated that it was about to despatch an expedition to form settlements. Within a fortnight the pioneer ship *Tory* sailed from Gravesend to prepare the way for the first emigrants.

The Government was compelled to take action. Crest-fallen and reluctant, Lord Normanby announced in June that certain portions of New Zealand would be added to the Colony of New South Wales, and that Captain Hobson, R.N., would be sent out as Lieutenant-Governor. The *Tory* had already arrived in New Zealand, and the first shipload of emigrants had left England before Captain Hobson embarked. When he arrived he found at the northern end of the North Island the large body of independent settlers who had drifted thither from Australia and elsewhere, and at the southern end the organised body of selected emigrants, already busy selecting the lands for which they had paid before leaving England.

The war between the Company and the Government was transplanted to the Antipodes, and continued there with equal vigour. Both parties were animated by a high-principled desire to do fairly and honestly by the natives, and both were fully determined that the acquisition of native lands for settlement should be carried out equitably. Both had set their faces against the validation of alleged unlimited purchases made in prospect of settlement, and against unrestricted "squattling." Long before the Treaty of Waitangi gave the Maori privileges never before enjoyed by a native race, both the Company and the Government had avowed their intention of protecting the natives from exploitation by land-sharks. Sir George

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Gipps, too well apprised of the abuses which indiscriminate squatting had inflicted on the infant colonies of Australia, issued a proclamation declaring void any private purchases of land that might be made in New Zealand. According to the claims lodged for recognition, four-fifths of the country had already passed from the natives. The Government seems to have lost all sense of perspective and proportion in the single desire to void these transactions. Barbarous in the last degree, disunited, warlike, and without leaders, the Maori were nevertheless approached by the Government on terms of equality as an independent people, and the sovereignty of England, which was proclaimed within a few months of Captain Hobson's arrival, was the result of a treaty of amity mutually negotiated and entirely irrespective of England's rights by discovery. Busby's "paper pellet" was evidently accepted as binding on the Government, for Hobson's instructions were not to proclaim sovereignty, but to treat with the natives for the cession of sovereignty and territorial rights.

The treaty was prepared by Busby, whose prestige was somewhat improved since the advent of British authority with guns behind it. Hobson himself was too ill to leave the warship *Herald*, which had brought him to Bay of Islands, and he had to rely largely upon Busby and content himself with revising the draft which the latter prepared for his approval. Hobson convened, and himself attended, a gathering of chiefs at Waitangi, and there, on February 6, 1840, the first important signatures were affixed to the Magna Charta of the Maori.

Imperfectly considered and fortuitous though it was, and independent of any pronounced public policy, there is no incident in the history of the British Empire that redounds more to the credit and the justice of the nation than this treaty. Nowhere else can history show such an example of humanity and generosity to a comparatively helpless savage race. It has been argued, and no doubt with some force, that England had not even yet abandoned hope that the Maori would prove to be capable of

self-government, and so would relieve Downing Street of the undesired responsibility of administering another colony. If that is so, then the scrupulous observance through many troublesome years of a compact so entered into is all the more creditable to the party which expected to be relieved.

The pregnant portion of the Treaty is Article II. :—

“Her Majesty, the Queen of England, confirms and guarantees to the Chiefs and Tribes of New Zealand, and to the respective families and individuals thereof, the full, exclusive, and undisturbed possession of the Lands and Estates, Forests, Fisheries, and other properties which they may collectively or individually possess, so long as it is their wish and desire to retain the same in their possession : but the Chiefs of the United Tribes and the Individual Chiefs yield to Her Majesty the exclusive right of Pre-emption over such lands as the proprietors thereof may be disposed to alienate, at such prices as may be agreed upon between the respective proprietors and persons appointed by Her Majesty to treat with them in that behalf.”

Neither Hobson nor the Maori signatories could have imagined what the effect of this treaty would mean to the future of New Zealand. To the Maori it was the Magna Charta of their liberties. It gave them rights and privileges never before enjoyed by a native race living in proximity to a civilised ; it fortified them against the land-grabber ; it gave respectability to the intermarriage of Maori and *pakeha* ; and it afforded a safeguard against pauperism. To the *pakeha* also it was full of import. It led to wars and misunderstandings ; it hampered development and was often a barrier against *bonâ-fide* settlement ; it encouraged malcontent tribes to live in sullen seclusion ; and it created a Maori aristocracy which is to-day in some measure supported by the rents of white settlers. As against all this, however, it afforded the New Zealanders an opportunity for the display of self-reliance, magnanimity, and generosity to an inferior race.

The New Zealand people have cheerfully fulfilled, at

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great sacrifices, an obligation in perpetuity which was assumed for them by the Imperial Government in the remote expectation of having to carry it out. In face of great temptations, costly wars, and exasperating hindrances to their national development, they have never seriously entertained the idea of repudiation. The Treaty of Waitangi is as binding to-day as it was seventy years ago, and New Zealand presents the unusual spectacle of a white and a black race which have lived together on terms of civil and political equality—and generally of amity—through a period of more than half a century, in which the domination of the country has passed indisputably from black to white.

As we have seen, the New Zealand Company in its genesis was almost a philanthropic organisation. It originated in the high aspiration of Wakefield (to whose mind commercialism was abhorrent) to supplant the haphazard and lawless exploitation of New Zealand by a properly ordered system of colonisation, in which an offshoot of the British race should be transplanted, with its social classes, its traditions, and its institutions of civilisation complete. The directors had no desire to make a profit out of the undertaking. They were chiefly men who, perceiving the destiny of England as a colonising Power, were anxious to bring the Government of England to the same view. The history of the first years of the Company and the difficulties in which it was soon enmeshed, must not be taken in derogation of the high principles by which the directors were animated. They were to a great extent due to the hostility of the Government both in England and on the spot and to the blunders of some of its own officials.

In a document which is preserved, the directors impressed upon their officers as they were departing for New Zealand the following general instructions :—

“ We recommend that you should on every occasion treat them with the most entire frankness, thoroughly explaining to them that you wish to purchase the land for the purpose of establishing a settlement of English-

men there, and you will abstain from completing any negotiation for a purchase of land until this, its probable result, shall be thoroughly understood by the native proprietors and by the tribe at large. . . . The danger to which the native owners are exposed, and which they cannot well foresee, is that of finding themselves entirely without landed property, and therefore without consideration, in the midst of a society where, through immigration and settlement, land has become a valuable property. In accordance with a plan which the Association of 1837 was desirous that a legislative enactment should extend to, in every purchase of land from the natives, as well past as future, you will take care to mention that a proportion of the territory ceded, equal to one-tenth of the whole, will be reserved by the Company and held in trust by them for the benefit of the chief families of the tribe."

Although working on parallel lines and to the same end, Hobson and the New Zealand Company came at once into deadly conflict. The question of the sovereignty of New Zealand was settled for all time by proclamations in May and June, 1840, and a French colonising expedition, destined for Akaroa, was fully apprised of the fact by the establishment of a British court of justice there in August.

Hobson, who had his headquarters at Bay of Islands, viewed with suspicion the action of the Company's settlers at Wellington, the new town on the shores of Port Nicholson. He professed, and pardonably enough, to consider as disloyal and improper certain defensive measures taken by the Company's settlers there. They were without any military protection against the turbulent tribes by whom they were surrounded; but in this respect they were scarcely worse off than any others of the four thousand Europeans then dotted about in isolated settlements in New Zealand and separated by seventy thousand savages. There had been several skirmishes in the neighbourhood of Wellington, and the defiant attitude of two of the chiefs could not well be

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overlooked. Hobson himself visited Wellington after firmly ordering the Company's flag to be lowered and substituted by the Union Jack. He received sufficient assurances on that visit that the steps taken by the Company's settlers were purely of a temporary nature, pending the appearance of the constituted authority, but there were other circumstances which prevented a permanent understanding being arrived at. A man of unquestioned integrity and honesty of purpose, he strove to do justice to the natives and at the same time to encourage genuine settlement. He can be pardoned, in the light of the antecedent disputes, for failing to appreciate the fact that in the peculiar circumstances of New Zealand almost the only safe and practicable form of settlement was that which was being attempted by the Company. The interests of the whole Colony would have been best served if he had made the Company his allies instead of antagonising them. There were, of course, faults on both sides. The Company's chief agent in New Zealand (Colonel Wakefield) and the Governor became of necessity as bitter partisans in the Antipodes as the Company itself and the Colonial Office were in England.

The rivalry of the two authorities was disastrous for all parties. Harassed and opposed at every turn, the Company was first of all compelled to retrench and delegate some of its powers to affiliated companies (which organised separate colonies), and finally, when its funds were reduced and its credit was destroyed, it had sorrowfully to surrender its charter (1850). Hobson himself, worn out with the worries and anxieties of his position, unpopular both in Wellington and in Auckland, disliked by land-grabbers and genuine settlers, had died in harness in September, 1842.

It was a sad prospect for New Zealand, but out of the ashes of the Company's hopes there survived seven sturdy colonies. All that Wakefield fought for was achieved. The British flag floated over New Zealand, and the foundations of the future Dominion had been laid, broad and strong, upon a basis of free, intelligent, and regulated

colonisation. A charter granting representative government had actually been issued, though subsequently withdrawn for amendment. In 1852 the Constitution Act was finally passed by the British Parliament, and Wakefield himself went to New Zealand and sat in the General Assembly. He wrote triumphantly in 1854 :—

“New Zealand has undergone neither more nor less than a revolution. The change, though enormous, has been peaceful, and will be very conservative in its results. The mutilated constitution has been healed and brought into vigorous action. It means that, after trouble and annoyance and disappointment and suffering without end, I am as happy as any one can be in this world, having a full realisation of what I have hoped and longed and striven for during so many years.”

CHAPTER III

THE PROVINCES AND THEIR PEOPLE

An Elysium of Providence—The dominant race—Rigid selection—The Wakefield ideal—A new English race—New Zealand in the sixties—The provincial system—Political nurseries—The cry for separation—Abolition of the provinces—Where the people came from—English supremacy—A romance of colonisation—The English settlements—Scots pioneers—The Otago pilgrimage—Irish in the North—"Parish" emigration—The gold rush—No concrete influence—The foreign infusion—French expeditions—Scandinavians, &c.—The Chinese—Birth and allegiance.

THE forests, the fields, the natural resources, and the mineral wealth of New Zealand might well seem to have been cast down by a conspiracy of Providence to make a highly delectable land the home of a people of high economic efficiency. Any race might have made itself powerful there. The troubles of the Maori arose from their own quarrels, not from any difficulty of living. If tribal jealousies had not made of the Maori a race of warriors, the ease of living might have made them a race of Oriental dalliards.

Similarly, when the white men cast covetous eyes at *Te Ika a Maui*, they might easily have found it the Utopia of their early Victorian dreams if the presence of the *tangata whenua* had not implanted in the soil a barbarism rarely surpassed in the lore of the times. War had made of them a highly specialised race. *Ipso facto* none but a highly specialised race could hope to co-exist with them. By a chain of evolution Providence set out to provide such a people. In every respect the white race which was soon to become the dominant

factor in New Zealand was rigidly selected for the rôle.

The selection commenced at the very beginning. The whalers and sealers who found their way to Bay of Islands from the southward track were not altogether men of no consequence. In their rough way many of them were men of high character. They had courage, enterprise, and many of the primal characteristics of honesty and straightforwardness. Most of them came from England, some by the way of the Australian colonies; a few were Americans from New England and Rhode Island. Some were "Dutchmen," to wit, French and Prussian traders, Scandinavian whalers, and a casual Spaniard or Portuguese.

A sprinkling of these foregatherers went to live amongst the Maori. They were joined by drifters from Australia: some free-men or time-expired, a small minority escaped convicts from Botany Bay and Tasmania. On the whole, the Mother Colony itself was not so well founded from a social point of view as this pre-*pakeha* community in New Zealand.

From the late stage at which British sovereignty was declared the selection was of the most drastic. The body of men and women who left Gravesend by the *Aurora* were the survival of a triple selective agency. They had survived the wholesome and often exaggerated fear of the barbarous country to which they were going. They had survived the physical scrutiny of an organisation which set high standards for the new social organism it was about to found. They had survived, finally, the test of both capital and character which this courageous pilgrimage entailed. Edward Gibbon Wakefield would never subscribe to a scheme which proposed to transplant in new countries any of the bad or immoral elements of the old society. That was his quarrel with the old Colonial Office. He had a passionate admiration for the British social system, and he desired above all things to plant it intact in the new colonies. A due proportion of labourers and peasants was essential, but

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he set his face steadfastly against any proportion of moral or physical deficients.

"The aim of this Company," wrote the directors of the New Zealand Company in 1847, "is not confined to mere emigration, but is directed to colonisation in its ancient and systematic form. Its object is to transplant English society with its various gradations in due proportions, carrying out our laws, customs, associations, habits, manners, feelings—everything of England, in short, but the soil."

And the companies of the *Aurora* and of many ships after her were carefully selected samples of British society in all its grades. Scotland sent ships, too, filled with emigrants selected from the agricultural and artisan classes and largely drawn from the lowlands. But for all purposes the colony of New Zealand which entered into the consideration and the recrimination of the English politicians of the day was, in the first ten years of its existence, an English one. The adversity of that time had already made a new English race, which in 1853 cheerfully accepted the responsibilities of self-government, and, ten years later, in the hour of its darkest trouble, actually demanded to be freed from the help of the British Government and to carve out its own salvation from the wilderness of difficulties by which it was surrounded.

New Zealand in 1850 was a quaint congeries of communities dotted about along the coasts, separated from each other by hundreds of miles of sea and long, interminable land tracks. The English had colonised Wellington, Nelson, Whanganui, and Taranaki more or less directly. From Nelson the English pastoral province of Marlborough hived off; from Wellington that of Hawke's Bay. Auckland was settled haphazard (with a striking preponderance of Irish) by independent men from Australia, the Islands, and the home country. Labourers, too, drifted surreptitiously away from Wellington and Nelson to share in the prosperity of Government expenditure at Auckland, where Hobson had

placed his capital. The Scottish backwardness had been repaired in a signal manner by the settlement of Otago in 1848, under the auspices of the Free Church of Scotland. The English retort was the foundation two year later of the province of Canterbury, to which, at first, only persons belonging to the Church of England were admitted. From Otago the new and even more Scotch province of Southland was severed; and from Canterbury later the cosmopolitan mining province of Westland.

In these days of political federation the New Zealand of the sixties makes an interesting study. In their isolation the six chief colonies were rapidly growing into separate nationalities. At one time sixty thousand people maintained nine separate Parliaments, each with its ministry and its speaker, each with a remarkable dower of talent and administrative ability (the outcome of Wakefield's wise prevision), each dealing with its own lands and revenues, building its own railways and schools, and administering its own police. In the early days of isolated settlements the provincial councils did invaluable work. They were, of course, subject to the general enactments of the central Parliament (then seated at Auckland), but any encroachment of the General Assembly on their prerogative was fought tooth and nail by the whole force of provincialism.

It was many years before the expansion of settlement from these scattered centres brought the outposts of the different provinces into touch. In the meantime each little community had pursued its own train of thought, worshipped its own gods, created its own institutions, guarded its own privileges. In some ways it was a disastrous policy, as when it conducted the country to the verge of political separation. The South Island in its peaceful prosperity chafed at the expense of the native wars in the North, and for a while the demand for separate government and separate responsibility was entertained. The councils were the nursery of the politicians of the future. A brilliant *coterie* of men of

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the highest intellectual attainments and the best breeding had emigrated to New Zealand. By the providential selection which has profited New Zealand so bountifully, each province had at the head of its affairs personalities of commanding character and attainments. Featherston, Fitzgerald, Moorhouse, Fox, Dillon Bell, Weld, Macandrew, Whitaker, Stafford, Stout, Rolleston, Seddon, Grey, Fitzherbert, and Hall were all members of the provincial councils, and most of them were vigorous champions of those bodies when their abolition was imminent.

The good results of the work of the provincial Governments in the earliest days cannot be exaggerated. As boards of works on the spot, as the representative institutions of communities far separated from the governmental centre, they were invaluable. The whole foundation of the political life of New Zealand was laid in these primitive Parliaments, from which the leaders passed with clock-like regularity to the larger assembly at the capital. The immediate and close intimacy of the people with their own public affairs was the basis of that strong political acumen which has distinguished public life in New Zealand from that of all the other colonies, and which has made it impossible for New Zealand to produce serious scandals and malpractice in its administration.

If we except the lack of uniformity in the land regulations, then the rift which appeared when the South Island desired separation from the North was perhaps the clearest evidence that provincialism had had its day. There could be no possibility of a separate government for each island, and it was positively dangerous that provinces enjoying such a variation of national responsibility as the peaceful development of Otago and the tempestuous wars of Auckland should be allowed to work out their destiny on independent lines. Year by year the responsibilities of the General Government were becoming heavier. It had in one Act assumed the whole burden of native affairs, in another dispensed with the

assistance of British troops. These things meant nothing to the South Island, but it meant much to the General Government that the resources of the country were to a large extent under the control of the provinces and could not be drawn upon for the work of the nation as a whole. Provincialism was doomed. But it did not yield without a struggle of Titans, nor die without leaving behind a monument to its great usefulness. When the councils passed irrevocably out of existence in 1876, New Zealand lost a set of institutions which could still have done good service as local boards of works, and Parliament was burdened with a great deal of technical detail which should never have engaged the councils of the nation.

The abolition of the provinces coincided more or less perfectly with the point at which the spread of settlement had effaced the natural divisions of the provinces. The people of Canterbury and Otago, Wellington and Hawke's Bay, were fusing already, and the multiplicity of social and political institutions must have caused unending friction and economic loss. Otago, the most shrewdly progressive of all the provinces, had an education system far in advance of anything else in the colony, and was steadily attracting to its halls the better-class youths from all the other provinces. Canterbury, the pastoral province, was the richest of all until the goldfields brought a new prosperity to the Otago Scots. In Westland was a cosmopolitan population of miners who had sought self-government chiefly because pastoral Canterbury, across the mountain barrier of the Alps, had little sympathy with a development which it neither understood nor loved. Nelson possessed a quiet, unprogressive population of agriculturists, Marlborough an equally unprogressive offshoot of pastoralists. In the North the people of Wellington had never been free of the fears and turmoils of war: those of Taranaki had made gallant efforts to cultivate their threatened holdings. In Hawke's Bay the squatters had time and again been summoned away from their flocks to stall off the minatory tribesmen; and in Auckland, of course, development had been

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hemmed in close to the root of the peninsula by the sullen Waikato tribes. Almost without exception the pioneers had been through a careful and rigid selection. There was no influx of hereditary paupers, no surreptitious infusion of criminals or convicts. Every stream of emigrants that reached the shores of New Zealand had run the gauntlet of selection, if it had not actually been through the fire of experience. And this is the story of the whole immigration policy of New Zealand, except for a decided and dangerous laxity towards the close of the Vogel regime.

Let us see where the men came from.

Though some of the most distinguished of the early pioneers were Scots, the senior nationality was all along the most prominent in the New Zealand field. They provided the great discoverer Cook, whose name is much more closely connected with New Zealand than that of his predecessor Tasman. They, through the medium of the Anglican mission of Samuel Marsden, planted the first abiding settlement in the land of barbarism. This settlement, which was never dislodged, made its appearance at Bay of Islands a quarter of a century before the British flag was hoisted. An English expedition reached Hauraki in 1825 with the intention of settling there; but a native war-dance so destroyed their peace of mind that the emigrants sailed incontinently away. The only members who stayed behind in New Zealand were four Scots, the pioneer industrial settlers of that race.

It fell to the English, too, to give the world the most heroic incident of colonisation since the days of the *Mayflower*. The story of the New Zealand Company is altogether a romance. It is the narrative of an idealistic propaganda in the Old World carried out as a political vendetta to the New: a romance of courage unflinching and purpose unalterable in the face of every obstacle that a hostile Government, a savage barbarism, and great physical discomforts could interpose: a narrative of humble men staunch in loyalty to their object in life, and of a better class foregoing all the pleasures and

luxuries of idleness to be the leaders of a struggling and menaced little England in the wilderness of the Pacific.

The character of the English emigrant has shown itself faulty in more than one colony. It lacks the shrewd instincts of adaptability and practicability which are necessary in all the little affairs of the emigrant. But the courage of the men of Devon and Cornwall, the same who pioneered the pilgrim States of America, has helped to make brilliant the story of the English in New Zealand. While the haggling of the Government and the Company was proceeding in all its bitterness, the affiliated associations planted thousands of English settlers in all parts of New Zealand. In Wellington they were thrown down landless in a labour market chronically overfull. In Nelson, where their ways were easier, they suffered depression by fear of the wrath of the Maori chiefs, who had exterminated a Nelson expedition at Wairau. In Whanganui they gradually pushed their outposts, their sheep, and cattle into the bush and the rolling *ti*-sentinelled downs. In Canterbury their path was smooth. Taranaki is the outstanding triumph for the English character. Again and again the rank and file of the West Country folk have had to take the field in defence of their holdings.

All the earlier English settlements of the New Zealand Company were cosmopolitan as regards the nationality of the emigrants—Wellington actually received several companies of Scots direct from the Clyde—but Canterbury was designed to be exclusively a settlement of adherents of the Church of England. In view of the galaxy of men of good birth and great intellectual attainments who had already settled in the other provinces, it is amusing now to read the resolve of the Canterbury association, as expressed by one of its directors :—

“(The directors) have determined that no person shall emigrate under their auspices who shall not be a *bonâ-fide* member of the Church of England. Without a

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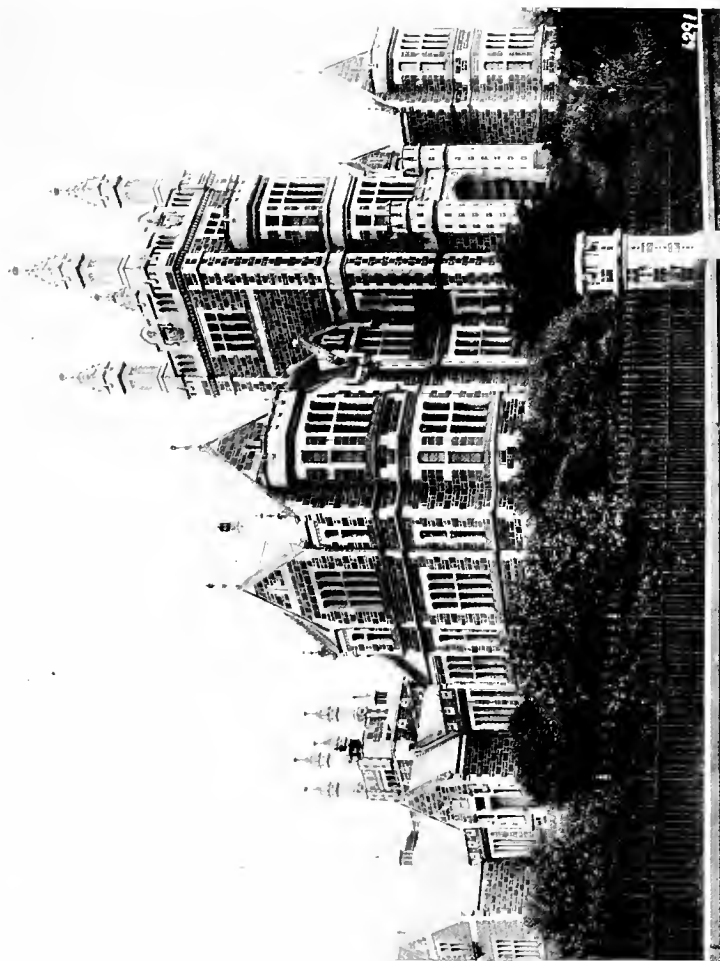
certain provision for religion and education the gentry of England, who are religious and educated men, cannot be expected to emigrate."

Before the new settlement had received any serious hurt from a restriction which eventually must have proved harmful, the directors thought better, and withdrew it. Ten years later we find the province granting assistance to emigrants of whom just over one-third were English. In the first provincial councils of New Zealand 86 out of 143 members were English, and to-day persons of English birth constitute 42 per cent. of the total immigrant population of the Dominion.

In individual pioneering the English yielded pride of place to the Scots. Even the four sawyers of the *Rosanna* expedition were not the first Scots in New Zealand. The city of Auckland, which for a quarter of a century was the capital of the colony, was established on land which had been purchased from a Scots offshoot of one of the abortive New Zealand companies. The first settler on the shores of the Waitemata harbour was a Scot.¹ Then came Canterbury. While the Company's emigrants were penned in at Wellington without hope of securing the land for which they had paid, half a dozen Scots built a schooner, explored the South Island, and established themselves as independent settlers on Banks' Peninsula. The peninsula and the adjacent plains were peopled thinly by Scots before the organised colony of English arrived. Scots pioneers were farming in the province of Otago three years before the regular settlement arrived. Up to 1842 only one-sixteenth of the immigrants who came to New Zealand under organisation were Scots, and the greatest difficulty was experienced in filling up the ships from the Clyde.

Otago was, perhaps, the most remarkable colony of the whole Victorian era. Mr. George Rennie, of Lothian, a

¹ Dr. (now Sir J. Logan) Campbell, born in Edinburgh in 1817; M.D., F.R.C.S.; arrived in Auckland, 1840; member of first Provincial Council; Provincial Superintendent, 1855; member of the House of Representatives, 1855; Mayor of Auckland, 1900; knighted, 1902.



THE OTAGO BOYS' HIGH SCHOOL, DUNEDIN (BUILT OF OTAGO STONE).

son of the famous agriculturist, simply describes its ideals thus :—

“Their resolution to emigrate was taken under the condition that their minister and their schoolmaster were to go with them, and they have provided a fund to endow them, so that the community shall be constituted similar to a parish or county in Scotland. Do away with this and the party will be broken: maintain it, and a more promising colony of industrious and efficient settlers never left the shores of Great Britain.”

The Otago settlers were late in the field. They were without some of the advantages which had been vaunted for the earlier settlers. They were drawn chiefly from the agricultural and artisan classes—poor men with rich aspirations. True, the Scots settlement was not without its dower of talent; but generally this was the casual talent of humble people. Much more remarkable than the attainments of its leaders were the homogeneous worth and the stolidity of purpose of the rank and file. The Otago settlement was in the best sense a pilgrimage. It was a migration of religious people, drawn chiefly from a humble plane, bound together by a religious purpose, as were their forefathers the Covenanters. They set forth with no exultant expectations of power or wealth, but filled only with a sacred desire to make brighter homes in a land offering the prospect of independence and comfort. Bound to the traditions and institutions of a land they were leaving without anger or malice, they only desired to perpetuate in the new land the society of the old. There were no sharply defined class distinctions. The leaders were not nominated by the influence of wealth or parentage. If there was any operating *motif* in this respect it also had a religious aspect.

Otago soon became the model New Zealand society. Its enlightened institutions nurtured many of the great political figures of the later decades: its educational institutions produced most of the thinkers, the professional men, and the officials for the whole of New Zealand. Sturdiness, self-reliance, and singleness of

purpose bore their fruit in the economy of the people and the province. At one time the trend of thought was narrow in the extreme. It was a fatal tendency fostered by the prosperity of the province and the excellence of its institutions, but corrected, happily, by the vigorous infusion of liberal ideas which followed on the opening of the goldfields. Elsewhere in New Zealand Scots were abundant. In the North Island councils one-sixth of the first members were from north of the Tweed. In the whole of New Zealand almost one-fourth of the members of the first councils were Scots, and to-day one-sixth of the immigrant population are.

In the days of assisted immigration (in the seventies) there was a very general demand for Scots. Every province wanted them. Even Canterbury and Hawke's Bay were glad to secure bodies of Highlanders for their back country. A very picturesque migration of Highlanders, which had its origin in a religious dispute in 1817, reached New Zealand, by way of Nova Scotia and South Australia, in 1853—just such an organised wandering of clansmen as sallied forth from Wellington to Canterbury in ships of their own construction in 1841, and from Banks' Peninsula to the Sandwich Islands some years later. The influence of Scots is undoubtedly the most concrete and appreciable of all the nationalities engaged in the colonisation of New Zealand.

Irishmen first appeared in the new field as independent settlers about 1830. A number of them, obtaining their ticket-of-leave, or effecting their escape from the political prison gangs of Australia, found a sanctuary which was not likely to be violated amongst the savage tribes of the North. A distinguished countryman, Lieutenant McDonnell, established a dockyard on the Hokianga about 1831, and in a few years a whole village of Irish and half-caste families had assembled there. Amongst them the Roman Catholic mission of Bishop Pompallier had its chief strength. Under the parish system of emigration Irish peasants were encouraged to join this little settlement, and thus automatically the Hibernian

community at Auckland became an institution of established repute. There was practically no organisation of Irish emigration. The peasants joined in the stream because their family ties drew them towards their friends, now generally well-to-do. Two-thirds of the twenty thousand emigrants who reached New South Wales in 1840-1 were Irishmen, and Auckland, lying adjacent across the strip of ocean, received its quota.

But the most noteworthy influx from Ireland to New Zealand took place in the sixties, when the outbreak of the goldfields diverted from California and Bendigo the full-bodied stream of stalwarts which was then a feature of the social economy of the world. This stream was drawn largely from the malcontents of Ireland, and it gave to public life in both Australia and New Zealand, as already in California, a phalanx of the strongest characters and the brightest intellects which were ever engaged in the shaping of new Britains in the Antipodes. There can be little doubt that if the Irish had been organised New Zealand would also present a foil for the character, the brilliance, and the administrative ability of the Irish no less distinguished than the Scots province of Otago or the English provinces of Canterbury and Taranaki. The parish system of emigration was effective enough in transferring the emigrating class to the colonies, but it did not develop or exhibit in the new land national character and ability as a concrete influence in public or national life. The Irish were fused in the mass of the population, and only appeared as a living force in the person of distinguished individuals—statesmen, orators, or commercial captains.

In spite of the neglect of the Irish field by the colonising organisations, we find 22 Irishmen amongst the 143 members of the first provincial councils. In Auckland the proportion was twelve out of twenty-six; in Westland, where the cosmopolitan miners congregated, two out of eight. Almost a sixth of the immigrant population of the Dominion to-day are of Irish birth.

The British ideal is admirably conserved in New

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Zealand in a population of a million, of which less than $2\frac{1}{2}$ per cent. are of foreign birth. Diverse attractions brought the foreigners to New Zealand. First of all there were the French. The romance of Akaroa is one of the prettiest in the history of New Zealand. The colonising ambitions of the Old Empire, which led Crozet to take possession of the North Island in the name of Louis XV. as "France Australe," were renewed sixty years later. For a decade or more England wavered in the face of the claims of certain French whaling captains. On each side of the English Channel a band of merchant-politicians was recruiting pilgrims, and stowing away its bales of stores for the voyage to the promised land. In England the Crown set its face against the venture. In France Louis Philippe gave a money grant and the services of some picked men to help. The English sailed away into the South with a sullen official menace overhanging, the French with a frigate to convoy and protect. It was a bold and lonely Englishman at the Antipodes who eventually frustrated the French scheme. But the French emigrants, disappointed and cheated, made their homes on the British soil. For five years they had their own official Governor : then they accepted citizenship in full and remained. Their French names appear all over Banks' Peninsula, as the names of the early French explorers stud the outlying islands. But the Akaroa French were long since absorbed into the population and Anglicised, and the French-born in New Zealand are now only a few hundreds.

Then there are the Scandinavians, without peer the finest recruits that a British colony ever secured from the foreign field. Many of them were the *protégés* of a bishop-politician exiled from Denmark by the unpopularity of the war with Prussia. Wherever they went—and the provincial Governments contended eagerly for them—their native virtues deserved and won success. Their settlements are models of industry and thrift. By their cohesion, perseverance, and industry they have actually exerted an influence on the national character. Either

morally or economically there is not a blemish on their record. As bush settlers, sawyers, and agriculturists they of all aliens have justified the expense the country incurred in their immigration. The Scandinavians in New Zealand amount to 1·87 per cent. of the immigrant population.

Though not so conspicuously successful, the Germans have been a sound and valuable entity in the population. Half a dozen appeared in the first case amongst the French settlers at Akaroa. A few arrived very early at the Chatham Islands, and then, at the time of the New Zealand Company, a whole German settlement, affiliated to the Nelson Company, proceeded to New Zealand and established itself a few miles from the town of Nelson. They had their schools, their pastors, and their churches. They passed with the British settlers through all the troubles of a stormy infancy and survived as a healthy colony in themselves. A second expedition, chiefly of Mecklenburgers, arrived to find the colony at the depth of a depression, and one-half forthwith left for South Australia, where German villages were already in existence. The German field yielded many immigrants at the time of the gold rushes, and it was well exploited under the Vogel policy. Natives of Germany numbered four thousand at the last census.

The only other considerable infusion from Europe is of the so-called "Austrians," a generic name which includes all natives of the dual monarchy, the Adriatic littoral and the Balkan States. They are to the gum-fields of the North what the Scandinavians have been to the bush, but they can scarcely be placed on the same plane as members of a British community. They are only half as numerous as the Germans.

It would not be accurate to class the Chinese in the Australasian colonies as an integral part of the nationality. The Chinese, who generally appear as small traders, hawkers, and mechanics, have always been sojourners, and they have generally occupied a position much more dignified than helotry. They have entered with success into occupations which are not sufficiently profitable for

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Europeans. They have even ousted Europeans from industries which they formerly found remunerative. With rare exceptions their morality, their perseverance, and their sound commercial virtues have risen superior to mountains of racial antipathy. Since the gold-fields broke out there have been not less than three thousand Chinese in New Zealand until the last few years. Surviving all the disabilities of language, race, and custom, the Chinese in New Zealand stand high to-day amongst the foreign races who, in a small way, have assisted in the building up of the country. Two very important industries—dairying and gold-dredging—owe much to the enterprise and initiative of Chinese citizens.

But in each of the cases here referred to the smallness of the infusion calls for remark. New Zealand is essentially a British community, as this table (from the last census figures) shows :—

	Birth.			Allegiance.
British	867,466			875,722
Foreign	21,112			12,856

The analysis of the New Zealand nationality at the last census was as follows :—

	Number.					
Native-born whites	606,247
Maori	47,731
Cook Islanders, &c.	12,340
English and Welsh	118,704
Scots	47,767
Irish	42,460
Australian	47,256
Other British possessions	4,560
Germany	4,174
China	2,602
Denmark	2,277
Austria-Hungary	2,212
Sweden	1,618
Norway	1,396
United States...	1,168
France	624
Miscellaneous	5,513
Total	948,649

The population is now upwards of 1,100,000.



IN A KAURI BUSH.

Trees 45 to 50 ft. girth.

CHAPTER IV

FORESTS AND PROFLIGACY

Spars for the early navigators—*Kauri* timber—The *kauri* forest—Durability of native woods—Tests of strength—The wantonness of the *pakeha*—Axe and fire—Anxiety in Parliament—The forests in 1873—Vogel's Forest Settlement Scheme—The executioner's warrant—A conservator of forests—A relapse—Foreign imports—The resources to-day—*Kauri* for eight years—Cutting capacity of the mills—Tree-planting—Restoring the *kauri*—The age of the trees—Competition of Oregon pine—The rivers of the North—Employment.

QUITE the first great fact that impressed itself upon the seamen adventurers to New Zealand after they had recovered from the shock of encountering such a gross barbarism was the surpassing value of the immense pine forests of the northern bays.

Practically all of the first navigators refitted at one or other of the bays which were most frequented, and more than one secured new spars for his vessels. The legion of ocean rangers, the whalers, found in the forests one of their main reasons for establishing themselves on shore, and by and by, long before white men had gone to live in New Zealand in any numbers, the warships and storeships from the convict stations in Australia made regular calls at Hokianga, Coromandel, and Bay of Islands to secure spars for the dockyards of England. In the first few years of the century British ships were clearing laden with spars for the Cape of Good Hope, India, and England. The natives, discovering that there was money in the business, became expert sawyers, and for some time the traders were able to fill their hulls with both timber and flax, at prices far below their real

value. They carried this to such an extent that in the primitive colonial days, nearly a century back, there was almost a glut of New Zealand white pine on the Australian market.

Two decades before the British dominion was established, shipwrights from England and Scotland were merrily at work in the Hokianga River, whence every year issued several small vessels, chiefly brigs, for the colonial trade. *Rata*, the deadly parasite, *puriri*, and *kauri* were principally used in their construction. The timber trade expanded rapidly when the arrival of the whites called for *pakeha* houses in place of the native *whares*. The *kauri* now attained to its full value as a timber tree. The occurrence of this tree—undoubtedly the finest in the New Zealand forests—is confined to a restricted area roughly included in the Auckland peninsula, northward of a line from Whangaroa Harbour on the west to Katikati on the east. The trees, giving evidence in some cases of a thousand years' growth, reach a height of nearly 200 feet, and the bole occasionally measures 100 feet in circumference. *Kauri* was used primarily for spars and planking for ships, but when the whites came it was pressed into service for housebuilding. There are houses still sound which were erected seventy years ago. Its unique value was so amply demonstrated that the forests have been subject to a vigorous onslaught for the last hundred years. It is one of the finest and most beautiful woods for cabinet work, its dainty mottling giving it an especial value for polishing. Mining timber of the best quality, too, is obtained from the *kauri*. Logs excavated from the site of an ancient forest have been found to be quite sound and converted into railway sleepers. Finally, the resin exuded by the tree is in itself a valuable article of commerce. What wonder that the resources of such a timber have been ruthlessly preyed upon, and that the extinction of the limited forests is in sight!

But this is only one of a host of valuable timbers that the New Zealand forests hold. They possess timbers

with qualities placing them pre-eminent for almost all commercial purposes. There are woods of exceptional durability, such as the *totara*, *manuao*, and black *maire*; timbers of remarkable beauty, as the *rewarewa*, *puriri*, and red pine; and others whose even grain or freedom from flavours render them unusually valuable, such as the *kauri* and white pine.

With something like ten thousand miles of telegraph line to maintain, the Telegraph Department of New Zealand is something of an authority on the comparative values of the different classes of timber. It has tried most of the native trees and discovered virtues in unexpected places. *Kawaka* (cedar), for example, is a valuable timber where bush and grass fires are to be feared, because it does not burn readily. Black pine would be excellent if it were not liable to the ravages of the worm. The beautiful *puriri* is almost the only native timber that is not liable to the attacks of the *teredo*. *Matai* also resists well, but the *totara* is the least vulnerable of all. Silver pine is entirely an excellent timber. A board cut in 1898 from the stump of a pole erected in 1870 was found to be quite sound. But silver pine is debarred from many of the uses for which it is suited by the fact that it is not readily found in lengths of more than 20 feet. The timber which contains the fewest blemishes, and has therefore come into almost universal use for telegraph poles, is the *totara* (*Podocarpus totara*), whose only vice, a tendency to snap, is obviated by the use of excessively heavy poles.

As for the *kauri*, it has its weaknesses. The Royal Engineers in 1863 erected between Auckland and one of the outlying redoubts a telegraph line in which *kauri* saplings of 14 to 18 inches girth were used. In three years they had decayed; in five the whole line had to be renewed. Unprotected *manuka* piles driven in 1871 were rotten three years later.

The following table shows the results of experiments, made over a period of some years, with some foreign comparisons:—

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			Transverse Strength. Lb.	Elasticity. Lb.	Weight per Cubic Foot. Lb.
British oak	128·55	127·01	55·96
British beech	...	...	129·66	195·83	43·37
British ash	...	...	169·2	180·07	46·19
Baltic deal	...	...	144·25	116·0	36·77
Riga fir	...	...	89·96	167·77	46·46
Black maire	...	...	314·2	193·0	72·29
Kauri	...	...	165·5	97·0	38·96
Kahikatea	...	...	106·0	57·9	30·43
Manuao	...	...	230·0	200·0	49·01
Manuka	...	...	239·0	115·0	59·0
Matai	...	...	197·2	133·0	49·07
Puriri	...	...	223·0	175·0	59·05
Rata	...	...	196·0	93·0	65·13
Rewarewa	...	...	161·0	93·0	48·92
Rimu	...	...	140·2	92·8	36·94
Tawa	...	...	205·5	142·4	47·45
Totara	...	...	133·6	77·0	35·17

The New Zealand "bush," as the forest is always called, was altogether too luxuriant and extensive to receive much consideration in the unpoliced colonial days. When the white folk first came to the country whole provinces lay under the impenetrable gloom of the pristine forest. Fully one-third of the country was covered with the finest timber. The Maori tribes had their own particular localities for procuring trees for specific purposes, but the Maori made a very restricted use of the forests as compared with the domestic economy of the whites. Certain trees had a special value for certain purposes. All others were simply fuel. If nothing had occurred to the forests of New Zealand worse than the depredations of the Maori, the timber supply would be as abundant to-day as ever. Close to the fortified *pa* was the *kainga*, or dwelling village, and about the *kainga* was a small patch of land cleared for the limited agriculture of the natives. They had no stock to graze. Within a stone's throw of the *pa* was the dark fringe of the forest, with only a foot track for scores of miles.

The *pakeha* simply wallowed in the destruction of the



PREPARING TO FELL A KAURI.

bush. If he required boards to build a three-roomed *whare*, he devastated an acre of timber. If he wished to plant potatoes or wheat, he put the flames through the undergrowth, felled the large trees, and dragged them aside to rot. The destruction was appalling, and it went on for thirty years without the slightest check or protest. In this period the denudation of the forest already had some detrimental effect on the climate here and there, and the severity of floods in the rivers was marked. With the hillsides and the upper reaches bare to the elements, the snow or rain-water passed off rapidly. The streams rose without the slightest warning, tearing down through the gorges, eroding the banks, overflowing farms, and devastating the lower alluvial flats with silt and boulders. It was a very disastrous retribution for the recklessness of the white man.

Even so early as the sixties there was a rudimentary species of forest conservation, which threw the onus upon the police constables to see that no fires were wantonly lighted in the bush. But local constables were too busy with a multitude of more pressing duties, and there the matter ended.

The first suggestion towards a decent conservation of the forests came from Victoria, where a Royal Commission investigated the question in 1867. Acting on this hint, the New Zealand Parliament in 1868 decided to have data collected to show what the position was in the colony, and what it should be. It took about five years to make the report complete, and meanwhile Parliament anxiously endeavoured, like a prophet in the wilderness, to stay the hand of destruction. Dr. Hector, the distinguished scientist who was then in charge of the geological survey of New Zealand, warned the country against the results of its policy. For all practical purposes, he contended, the mere thinnings of the forest were ample to meet all the requirements of settlers for fencing and firewood. There was no earthly necessity to destroy the whole forest in this simple quest.

Parliament thus early recommended the planting of

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forest trees in the treeless plains of Canterbury as a precaution against the serious desiccation of the land in the summer and the extremely cold winds of winter. It also endeavoured to bring about some co-operation between the provinces and the General Government.

When the report ordered by Parliament at length appeared, it showed that more than one-third of the native bush had already disappeared. Approximately the areas of bush-lands at the time the whites entered upon their depredations and in 1873 were as follows:—

Area of Province.			Area of Bush.	
	Acres.		1830. Acres.	1873. Acres.
Auckland ...	16,650,000	...	4,000,000	1,200,000
Taranaki ...	2,290,000	...	2,000,000	1,600,000
Wellington ...	7,000,000	...	5,000,000	3,000,000
Hawkes Bay ...	3,050,000	...	970,000	250,000
Nelson ...	6,928,000	...	3,000,000	2,000,000
Marlborough ...	2,720,000	...	800,000	500,000
Canterbury ...	8,693,000	...	300,000	180,000
Westland ...	3,025,000	...	2,000,000	1,500,000
Otago ...	16,038,000	...	2,300,000	1,900,000
Total ...	66,394,000		20,370,000	12,130,000

This was very startling evidence of the activity of a community of whites who numbered a few thousands in 1840, and only 300,000 in 1873. Since much of the richest agricultural land was covered with certain species of bush, these figures indicated quite plainly what the progress of settlement meant to the resources of the country. Sooner or later, if a rigid check were not applied, the whole of the fine forests of New Zealand would disappear without yielding anything like a due economic return to the wealth of the country.

Vogel realised at the beginning of the seventies that the active settlement policy which he was advocating would in all probability entail a more energetic onslaught than ever on the standing forests. His versatile mind took cognisance of the danger, and he outlined in 1874 a scheme for the establishment of what he called "forest settlements." So far as the forest was concerned, the



LOGGING AT THE MILL BOOMS ON THE WAIROA RIVER.

idea was to prevent any further wanton destruction of timber, and to ensure that the felled trees would not be sawn up until they had been properly seasoned. He intended to settle the pioneers in localities towards which railways were moving, and to employ them in the construction of roads and tracks. The felling of trees by the occupiers of sections was to be absolutely prohibited. During the proper season selected trees were to be felled under the supervision of competent overseers and sold to the mills when they were seasoned. The land itself was not to be sold until it was cleared of timber, and then the occupiers were to be encouraged to spend their earnings in the purchase of their sections and to replant. Exactly what encouragement this scheme offered to the establishment of sawmills and timber factories is not clear. The history of sawmilling has been on very different lines with regard to the source and quantity of supply. The millers had been too long accustomed to the free use of the forest to submit to restrictions of this sort, and the scheme made no progress.

But the benign intentions of Parliament were quite overridden during the next twenty years. Prosperity and expansion were heedless of the economic future. The beautiful bush was simply ravaged. Sawmills sprang up everywhere. Southland applied some general rules of working, but elsewhere there was no restriction. Whole acres of forest were devastated and destroyed to secure one or two fine specimens of *kauri*, or *totara*, or white pine. Millions of feet of immature timber were ruthlessly killed and left to rot on the ground. Possibly the settler, coming along with his cattle and sheep, fired the undergrowth and bared the cheek of the hill to receive the grass-seed, but as often as not the scarred and ravished countryside lay bleeding and desolate for years. For the sake of a few good boles the primeval forest was irrevocably sacrificed. The haste to get a few million feet of timber down to the plains or on the oversea steamer was feverish. It was a pitiful and

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wicked war. "Milling rights" meant simply and solely an executioner's warrant to pick out the eyes of the forest, to slay and ruin the rest, and then go elsewhere. In 1871 three million feet of timber were exported. By 1891 the figure was forty-two millions. There were 250 mills killing and slaying and burning and wasting. It was a reign of unbridled rapine and licence.

Even the settler became, by the terms of his lease, a wanton and a profligate. Under the strange definition of "improvements" he was compelled to hack down a certain area of the bush each year. Whether he could convert the timber or not was immaterial. If there was no sawmill at hand, he had simply to destroy it and sow grass and graze sheep amongst the blackened logs. There have been cases in which settlers have jeopardised their title by refusing to destroy the bush before a mill was at hand to cut the logs into timber. All the enthusiasm on the subject of forest conservation which had been worked up during the early years of the Vogel policy, and which had the hearty sympathy of that statesman, was utterly dissipated. Vogel did actually pass a Forest Conservation Act, but no regulations were made. It was a dead letter.

When Captain J. Campbell-Walker, in 1876, made his first report as Conservator of State Forests there was estimated to be still twelve million acres of bush undisposed of by the Crown. One hundred and fifty mills were at work, cutting nearly 130 million feet of timber each year. Only three provinces had any regulations at all for the protection of the forest, and there was no power to enforce compliance with them. In those days, and indeed up to the end of the century, the idea was held that every acre of bush that was taken up and cleared, even if the timber was destroyed by fire, was a national gain. That was the doctrine of progress.

The supplies were apparently inexhaustible. Labour was dear and timber cheap, and the millers had to use only the best trees and the best portions of them to make the business pay. In the extraction of these the rest of

the forest was sacrificed. There was no need in those days to look forward to the time when the inferior trees would have grown to maturity. While the timber was worth £30 an acre the State sold the land, timber and all, for £2 an acre. In spite of all warnings and expert advice, New Zealand has continued this policy of national profligacy with little remission up to the present day. Half-hearted attempts have been made to arrest it, but the following paragraph from Captain Campbell-Walker's report is as true to-day as it was when written in 1876 :—

“Having dismissed all idea of control over the forests exercised by the Government or Waste Lands Boards, there remains but little doubt that the sawmillers, hand-sawyers, and splitters have made the most they could, chiefly for their own advantage and doubtless also that of the purchasers. They have usually cut out the best timber and left the rest standing, paid little or no attention to the exclusion of fire from their own or neighbouring blocks of forest—in short, conducted their operations on the simplest and most remunerative plan for themselves, but the most wasteful and detrimental to the public estate.”

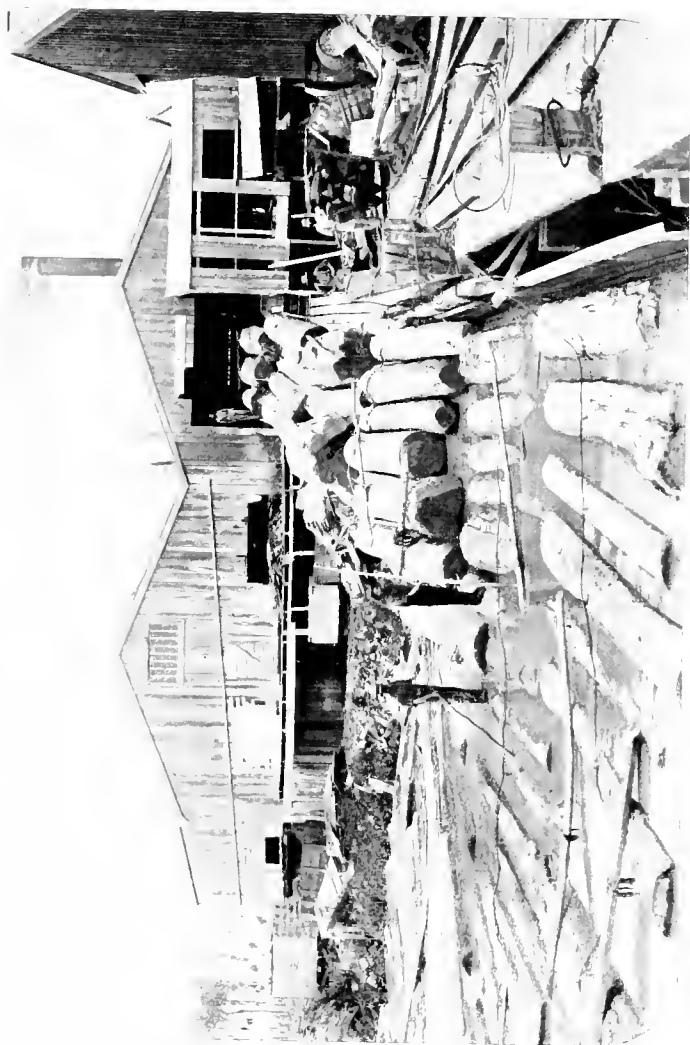
While the whole 150 mills were busy at this work, the Colonial Exchequer received only a paltry £2,600 a year in revenue from the forests. Needless to say, the New Zealand millers, from an accumulated experience of fifty years, were already the most expert and scientific in the world. Captain Campbell-Walker considered their plant and appliances for removal and conversion of the timber the best he had seen, but the methods of forestry, from the conservation point of view, the worst. Southland was unique amongst the provinces in the success with which it was conserving its arboreal wealth. There fires were almost eliminated, and the Provincial Exchequer received larger timber revenues than any other. Elsewhere caution was thrown to the winds. The millers were allowed to do as they liked, and every year's output of the mills entailed the destruction of two or three times

as much timber. The Department of Forestry, established in 1876, was abolished in 1887. All the forests on Crown lands had by this time been reserved, but the bush on native land, for which millers were constantly negotiating, was not protected against the old forms of destruction.

While this was going on, of course, the export of timber expanded. Every year 25 million feet went out of the country, chiefly to Victoria and New South Wales, with some quantity of the valuable *kauri* to Great Britain. Meanwhile considerable quantities were being imported—shingles and palings from Tasmania and New South Wales, pine from Oregon (in the United States), and a small quantity of deal from the Baltic. At this stage experts assured New Zealand that there would never be any reason to fear the competition of foreign mills, since all the imported woods were for special purposes. Cheaper labour and a better supplied labour market, it was even then admitted, had something to do with the success of the foreign timbers, and the better seasoning of the wood was a very important lesson for the New Zealand millers to learn.

So things have gone on. Certain areas have been permanently set aside as State forests, and a day has been proclaimed a public holiday each year to enable the general public to engage in the planting of trees. For the rest there has been a steady competition amongst the millers to get their areas of forest cut out as soon as possible so as to secure more. The industry, which ought to be highly scientific and to take cognisance of the necessity for conservation, has run amuck. So long ago as the stagnation of 1881 it was chronically over-capitalised. The local market was a small one even in a rising country. A large export trade was essential to pay interest on the capital employed.

An estimate of the timber resources of the Dominion made about four years ago shows that they are still enormous in extent. The reserve then visible on Crown



LOG DAM AT THE AOROA SAWMILL.

lands was about 20,465 million superficial feet, and there was an amount almost equal to that on native and private lands. Allowing for the area permanently reserved and judging by the capacity of the mills then in existence, it appeared as if there was a supply for seventy years. The latest estimate of *kauri* is very disappointing. The Crown lands appeared to hold about 448 million feet and private and native lands 664 million, a total reserve which would not keep the *kauri* mills going at full capacity for more than eight years. There is some assurance, however, in the fact that many of the mills which formerly confined their operations to this timber are now cutting other species. In the palmy days of the *kauri* all other timbers were absolutely sacrificed to the conversion of *kauri*, but the approaching end of the timber, over which every naturalist since Hochstetter has gone into raptures, has caused millers to pay some more attention to the inferior varieties. The latest estimate by a competent authority¹ of the probable duration of the New Zealand milling forests is fifty years. The assumption is, of course, that the local demand for building timber will be maintained throughout that period.

In spite of the alleged stagnation in the trade and the competition of imported timbers, the cutting capacity of the mills has steadily increased, and unless something is done by legislation, or new methods of building construction quickly supersede those now in vogue, there will be little forest standing at the end of the next three decades except on the Crown lands. At the beginning of the present year the extent of the forests was as follows :—

			Acres.	Superficial Feet.
Crown lands	...	...	7,010,535	18,688,874,784
National parks	...	...	2,079,979	1,439,799,940
Private and native lands	...	...	5,041,419	14,575,653,813
Total	14,131,933	34,704,328,537

¹ Mr. W. C. Kensington, I.S.O., Under-Secretary for Lands.

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The incidence of this timber may be generally judged by a return made in 1907, which was as follows :—

			Crown Lands. Sup. Feet. Millions.	Private and Native. Sup. Feet. Millions.	Total Sup. Feet. Millions.
Auckland ...	...	...	1,520	5,053	6,573
Hawke's Bay ...	...	...	1,017	1,226	2,243
Taranaki ...	...	...	41	736	777
Wellington ...	...	...	4,705	6,057	10,762
Marlborough ...	...	...	109	78	187
Nelson ...	...	...	5,592	1,121	6,713
Westland ...	...	...	4,418	2,314	6,732
Canterbury...	...	...	34	51	85
Otago ...	...	...	899	153	1,052
Southland ...	...	...	331	330	661
Total	...	...	18,666	17,119	35,785

More than one-half of the *kauri* was on native land.

All the warnings that had been uttered by experts since the early sixties might have fallen on deaf ears so far as any real steps to grapple with the evil were concerned. The State took up the attitude of preferring cure to prevention. Parliament did not do anything to preserve the vast forests on land belonging to natives, but it gave steady moral encouragement to the planting of trees by way of re-afforestation. During the last decade the Forestry Department has done admirable work in this direction. In the treeless regions of Canterbury and the bleak volcanic steppes of the North Island wide areas have been taken in hand for planting. No money was, in point of fact, voted for the work. It was paid for out of the revenues of the State forests, which have yielded for this purpose something like £170,000 up to date. Prison labour has been employed, and altogether something like fourteen thousand acres have been planted. Imported deciduous trees have been used for certain classes of land, but a determined effort has also been made to reproduce, on ever so small a scale, the fast disappearing areas of native bush. As for Arbor Day, the public has been surrounded by bush for so many years that it is not yet very enthusiastic on the subject of tree-planting,

which has generally been left to small societies of enthusiasts.

In view of the probable extinction of the *kauri* forest within the next few years, the State Department has made a useful provision for the future by setting aside and protecting against the depredations of fire and stock areas of recently cut-out and abandoned forest. Young saplings spring up in abundance on the sites of old *kauri* bush wherever natural enemies are removed. The State has taken over some of these areas as nurseries, and by clearing the dead undergrowth and keeping the undesired varieties of shrubs in check, it is hoped in time to make a sound start in the reproduction of the *kauri* forests which have been of such immense value to the State.

What chance posterity has of seeing the native forests of New Zealand reproduced from a start made anywhere in the present generation may be judged from the late Professor Kirk's computation of the ages of mature trees of different species :—

					Approximate Age. Years.
Kauri...	...	...	...	...	600 to 3,600
Rimu...	...	...	...	...	400 to 650
Totara	...	...	...	...	470 to 800
Matai...	...	...	...	...	270 to 400
Kahikatea	...	...	...	...	370 to 600
Kawaka	...	...	...	...	150 to 400

The oak, larch, spruce, eucalyptus, and Oregon pine may all be depended upon to yield two or three crops of mature timber in the time which the native trees take to reach maturity.

The assurance of Captain Campbell-Walker, thirty years ago, that foreign importations were not to be feared in competition with New Zealand timbers has scarcely been fulfilled. It can no longer be contended, at any rate, that Oregon pine is imported into New Zealand for purposes for which native timbers are not suited. A combination of circumstances has placed the local millers at the mercy of the imported article, and the imports have been growing during the last year or two

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with leaps and bounds. A section of New Zealand millers frankly admitted five years ago that they had to charge high margins for profit in order to earn interest on their capital, and that if an understanding had not been come to probably one-third of the mills would have had to close down. On this knowledge the Government of the day had to dismiss a protest against the importation, and it has since increased enormously.

The lumbermen of the Pacific slope are able to employ labour that is prohibited in the Australasian States, the labour of Asiatics, which can be procured at a mere fraction of the scale fixed by the Arbitration Courts of Australasia. For somewhat similar reasons they enjoy sea freights from Puget Sound to New Zealand which are lower than the land freights which many millers pay on their timber within New Zealand. Even if the industry were not inflated financially these facts would place the New Zealand mills at a very serious disadvantage despite the duty of 2s. per 100 feet which is levied upon Oregon pine. As it is, there is a conflict of opinion as to whether the millers or the industrial system of New Zealand is to blame, and a Royal Commission was recently set up to endeavour to solve the problem.¹

Quite the most picturesque sphere of the lumber industry is in the far north of Auckland, where half a century ago the coveted *kauri* established a full-bodied export trade. As a means of transporting the logs from the heart of the forest down to the mills, the wide, meandering rivers of this area are an invaluable asset. Through their agency

¹ The Royal Commission appointed to inquire into the timber industry and complaints against the competition of Oregon pine, reporting in July, 1909, declared that the importation did not menace the industry, but it recommended an increase in the duty on short lengths of Oregon timber. With regard to the price at which New Zealand timber was being sold the Commission did not consider it excessive. It was of opinion that the level of prices was to some extent due to the rates of freight charged on timber by the Government railways. The Commission did not investigate from the financial standpoint the capitalisation of the industry, with a view to ascertaining the truth or otherwise of the statements made in 1904, that there were too many mills to work at a profit without an understanding as to prices.



A MILLION FEET OF KAURI TIMBER ON A NORTH AUCKLAND WHARF.

there are few corners of the milling areas which cannot be tapped by short tram-lines. A recent flood, for example, liberated and floated down to the mills *kauri* logs which had been lying in a backwater for fifteen years. Some of the rivers, too, are navigable for long distances from the sea. The timber scows receive their cargoes at the mill in the heart of the forest and carry them direct to the oversea markets. Vessels of 1,500 tons, carrying a million feet of timber, can lie alongside the river mills to load ; scows of 500 tons can navigate the rivers for 100 miles ; and smaller craft creep as far again up the winding creeks. The Kaipara harbour, with its rivers and streams, affords a water frontage of 2,000 miles, all of which is utilised for the purposes of the industry. The shipping cleared outwards from the Kaipara in a year exceeds 50,000 tons. Even the lumberers of Oregon are not better placed in this respect. Elsewhere, though the rivers are too shallow and swift for navigation, they are used for floating the logs down to the mills. In some cases this is right down at the sea-coast, where the logs are cast up on the beach by the breakers.

Bush tramways are the arteries of the industry, running off at all angles through the forest so as to tap the greatest area at the least possible expense. Sometimes horses are used for haulage, more often bullocks ; and steam is used wherever the conditions will permit.

When the last detailed enumeration was made, in 1907, there were 411 sawmills in New Zealand, with a horsepower of 10,000, and employees numbering 7,139. The total cutting capacity was 718 million feet per annum, but the output was one-third short. Up to 1906 the industry had expanded by 40 per cent. in five years, but it was already, in 1907, feeling the first bad effects of foreign competition.

CHAPTER V

WHERE THE MAORI LED—"PHORMIUM TENAX"

A native industry—Universal utility—Export of native produce—Primitive methods—The last of Maori industry—"Booms" and "slumps"—Regeneration of the flax fields—"Mushroom" companies—Mills and methods—Strength of the fibre—The success of cultivation—Competition of Manila—State grading—A precaution against abuse—Prospects for the future—Export and price—Employment.

THE one industry in which the Maori showed the way to the *pakeha* was that in which he had an unique product to work upon. The Maori did not understand the value of timber as the white man did, but he was thoroughly conversant with every use to which his own flax plant could be put. The leaf was used for baskets, the root gum for food. The flower stalk was a tinder-box for long journeys, the honey of the flower a delicacy for children. The fibre itself was of universal use. Cloth, mats, and lashings were made of it and a hundred minor offices filled.

All over New Zealand the *Phormium tenax* is found, generally growing on the river banks and in swamps, and invariably cultivated in the vicinity of the native *pa*. It attains its maximum height in rich alluvial lands, where the sword-like leaves rise to eight or ten feet, and the *korari*, or flower stem, as high again. The qualities vary according to the soil, but the best fibre is found in hill flax. The plant grows to a height of nearly 6,000 feet above sea-level.

In the savage days one or two of the dozens of varieties were the most universal articles in the domestic economy of the Maori. The naval officers who touched at New

Zealand soon discovered that there was more than mere beauty in the clusters of shining blades about the *pa*. Every day they found a new utility in *harakeke*. Its strength and tenacity were from 50 to 100 per cent. greater than in European flax and hemp. In fact, the single fibre ranked next to silk in this respect. The Maori had neither cotton nor wool, but garments of extraordinary fineness and evenness of texture were woven by the women out of the fibre of *harakeke*, laboriously prepared by hand with the help of a sharp shell.

There were virtues in New Zealand flax which soon made it almost as eagerly sought after for naval purposes as the spars from the northern forests. Ropemakers in New South Wales and the official guardians of the convicts there also looked with longing eyes upon the flax beds of the barbarous little country, and made repeated efforts to secure the services of Maori craftsmen to teach European workers the art. The Maori themselves were quite prepared to sell flax as soon as they found it had an equivalent value in guns and ammunition, but even this aspect would not induce them to go to the trouble to produce it in anything like the quantities which were required. Governors Phillip and King, of New South Wales, both interested themselves in the matter, and the latter had some remarkably fine samples of canvas made from the fibre. Trials of rope made of it were also carried out at the English dockyards, with results that were generally declared to be satisfactory.

"Finding, after trying every process that came within his knowledge for preparing and dressing the plant, that unless some other means were devised it never would be brought to the perfection necessary to make the canvas produced from it an object of importance, either as an article of clothing for the convicts or for maritime purposes," Governor King arranged with a whaling captain to try to secure some dressers from New Zealand. This was in 1792. Twenty years later a report to the New South Wales Government bewailed the fact "that the

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mechanics of Europe had failed in their attempt to manufacture hemp at any moderate labour and expense." By the Maori method of scraping with a shell a woman working hard could produce 9 lbs. of fibre in a day, though the ordinary output was only 5 lbs.

So long as the natives were unsophisticated in the matter of barter, small vessels could generally pick up cargoes of hemp at a fairly low cost, but the quantity was quite inadequate for the multitude of purposes for which it was required. Expedition after expedition landed in New Zealand to try to evolve on the spot some improved method of treatment. Most of them commenced by boiling the leaf in water to disintegrate the fibre, but this impaired the strength and was, in any case, too costly a method. The officials of the Mother Colony of New South Wales and of the Admiralty, who were respectively anxious to get the fibre for canvas clothing and for cordage, gave the best possible assistance, but they were unable to develop any important channels of supply independent of the natives. And by and by the natives themselves declined absolutely to prepare flax for export.

Experiments continued to demonstrate the high value of the fibre. In 1830 the export of the commodity from New Zealand was estimated at 1,062 tons, of which probably more than half was produced by one or other of the imperfect methods of the *pakeha* interlopers. A London merchant, writing to his Sydney house in 1830, impressed upon them the necessity of urging their friends to clean the fibre well. Much of the hemp that reached England from New Zealand was then so foul that the ropeworkers would not work it up even at increased wages. Still the fibre had established its reputation. In 1820 it had been scarcely possible to secure £10 or £15 for it. Now it took precedence over Russian and Hungarian at prices ranging from £30 to £40.

The profits of the business speedily worked its destruction. Tons of badly dressed and inferior fibre were



IN A FLAX SWAMP : CUTTING THE LEAF FOR THE MILL.

hurried on to the market. The price fell 50 per cent. in one year. It was an absolute *débâcle*. Once and for all the Maori gave up flax-dressing for export. The *pakeha* did not know how to dress it. And that was the end of it. It was a good forty years before the export regained the volume of 1830.

The Government made liberal offers for the invention of machinery to separate the fibre on a profitable scale, but nothing was accomplished for many years. Eventually plant was brought into existence which has served the purpose more or less perfectly up to the present time, and which, in spite of its imperfections, must be considered satisfactory as compared with the rude methods by which the Manila fibre is separated. By the help of this machinery the industry revived, and it reached a high-water mark in the early seventies, when upwards of 160 mills participated in an output valued at £140,000 a year. By the very conditions of its existence the industry was foredoomed to fluctuate between dazzling prosperity and abject despondency. It was a sporadic industry at best, highly sensitive to the conditions of the market. The generality of flaxmillers, like the sawmillers, were practically nomads. They pitched their improvised mill where the leaf was abundant, stripped the ground clean, and then moved to a new site if the price was still good, or closed down altogether if it was bad. The amount of capital permanently engaged in established mills was comparatively small. As soon as a slump came many mills invariably closed down, and the slump came with the most perfect regularity as a natural sequence to the boom.

It was utterly impossible to establish the industry on a permanent basis without some stringent regulation. So soon as the product had rehabilitated its reputation on the market, mushroom millers, taking up poor areas and hurrying the hemp on to the market, reduced it to bed-rock again by the export of inferior and badly dressed fibre. A suggestion was seriously made in 1879 that the straw itself should be shipped to Europe to be treated there, but this was immediately ruled out of the question.

It would mean paying freight on a raw material of which not more than one-fourth at the best could be turned to account.

The slumps were not altogether a bad thing. They gave the flax swamps their only possible chance of recovering from the depredations of the boom. If the industry had been paying throughout, the flax swamps would probably have disappeared long ago or given place to extensive flax cultivations. After the boom of 1873 there was a depression which lasted for fifteen years. When prices recovered there was neither leaf to cut nor mills to cut it, and the industry did not again attain its high-water mark until 1890, when the export was again worth almost £400,000.

Here was one of the plainest cases for State "interference." The methods of the flaxmills were even more reckless than those of the sawmills. As prices rose the mushroom companies had to be content with poor areas and to pay high royalties for them. Every blade of the flax was cut down to the roots regardless of the condition of maturity. Rubbish of all sorts was stowed away in the bales; and when the boom burst the reputation of New Zealand hemp had also disappeared, and the flax areas were emaciated, if not ruined. Only fifty-four mills survived out of more than three hundred, only 600 hands out of 3,200. The output fell from 20,000 to less than 2,000 tons.

The flaxmill is a comparatively inexpensive establishment. The plant, except in the case of permanently established mills, does not cost much, and the mill itself is a more or less temporary cover for the machinery. If the swamp is a good one and the supply is likely to be permanent, then of course everything is on a better scale, and tramways are laid down to bring in the green leaf from all parts of the field. In a well-regulated swamp the mature blades are selected and cut off a few inches from the ground. In a boom field everything is cut regardless of length. The cutting of the leaves close to the ground, especially in winter, has a most

injurious effect on the constitution of the plant, retarding the growth for some years, if the plant is not altogether destroyed. The leaf is taken to the mill on tramways or on drays, and forthwith passes through the stripper, whose wailing, moaning sound, heard a mile off, is the invariable indication of the presence of a flaxmill. The duty of the stripper is to separate the fleshy substance of the leaf from the fibre, an office that is performed by hand in the Philippines. All inducements for the production of a machine or process that will carry out this work more effectively and at cheaper cost have been unavailing. There are numerous methods of bleaching, in some of which chemicals are used, but the customary process is simply water-bleaching, which requires the utmost care and vigilance. As it leaves the mill on some remote swamp in New Zealand, hanked and baled, the fibre is in condition for the London or American markets. Flaxmilling, in common with gum-digging and sawmilling, gives a great deal of employment to the drifting class of "unskilled" labourers. In some districts they work under an award of the Arbitration Court.

New Zealand phormium is in reality a secondary fibre. That is to say, it is used when Manila and sisal are scarce and dear. When they are plentiful and cheap there is no room for the New Zealand article. Its chief use is for the manufacture of binder twine, and with Manila for cordage, but its inferior strength prohibits its sole use for the latter purpose. A test of the strength of fibres gives the following results:—

				Average per Yarn.
Manila	...	...	...	245
Italian	...	...	...	221
New Zealand	...	...	...	143
Sisal	...	...	...	128
European hemp	...	...	...	122

Where the fibre is drawn from special localities it shows considerably greater strength. With special care

in the selection and milling of the leaf it can be prepared for much higher purposes and be made to produce much higher values. A miller thrice won the prize for the preparation of hemp by picking out blades of a special length and quality and paying special care to the working. A bale of this realised £75 a ton, while the ruling price for good hemp was only one-third of that amount. He declined, however, to give a quotation for 50 or 100 tons of the same quality on the ground that he could not attempt to mill it to such a fine standard. It is an open secret that New Zealand fibre of the best quality—for which, by the way, it is generally supposed there is no market—is actually used in the manufacture of textile cloths.

The general impression used to be that flax would not grow to perfection except on the banks of streams or in swamps. This was perhaps a natural inference from the fact that it was generally found in those positions, but the draining of one or two large swamps thoroughly dispelled the idea. No sooner had the water been drawn off than the leaf, which had been short and sickly, commenced to show signs of renewed health. It grew as much in one year after draining as in three years before. Experiments in planting gave the same results. It was found that poor country unfitted for anything else will grow flax fit for cutting every three years; that cultivation invariably increases both the yield and the quality; and that hill flax will yield from 10 to 15 per cent. more fibre than the swamp leaf. Moreover, to procure an even quality and an increased quantity the plant should be cut over each year, from one-third to one-fourth of the leaves being taken at a cutting.

All these facts have dawned gradually upon the flaxmillers. The Maori understood to a nicety the high economic value of the flax, but the *pakeha* persisted for years in regarding it as a weed, a thing to be exterminated because it was plentiful. Of the dozens of varieties which are to be found in most of the flax fields, the millers

generally are ignorant, though it is an accepted fact that if the crops were restricted to the stronger and more useful varieties, the value of the fibre would be greatly improved. The whites are unwittingly reducing the standard of their fibre by dressing many of the varieties of flax which the Maori would never consider strong enough for use. Planting has already been carried out from end to end of the country with the best results.

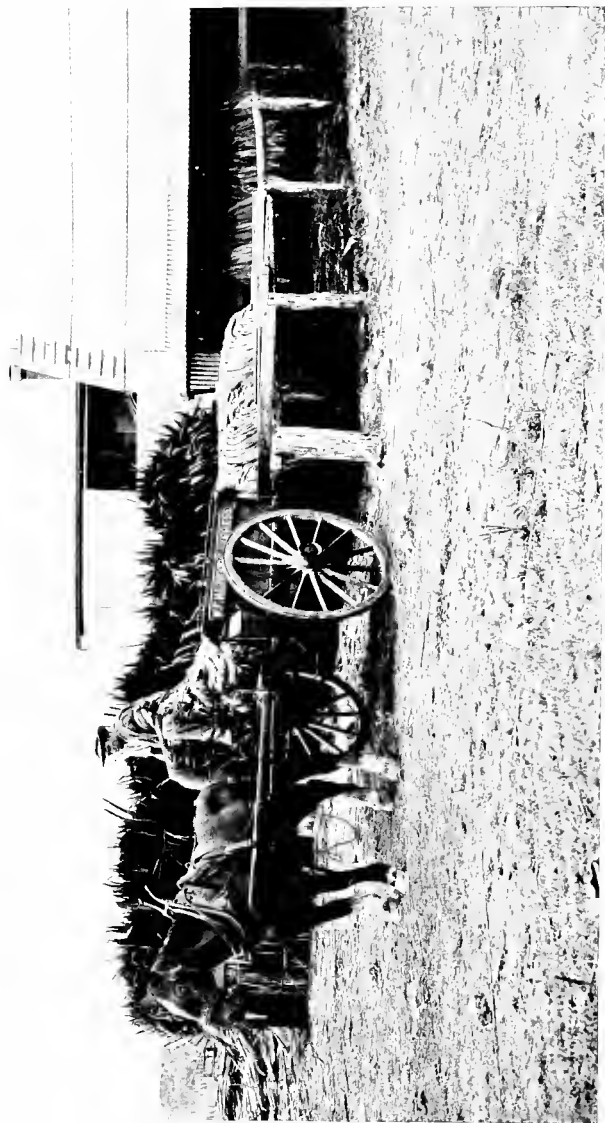
At present the hemp industry may be said to be at a crisis. The American occupation of the Philippines has so entirely revolutionised industry there, that the quality of Manila has vastly improved and the supply become assured, except in the event of a hurricane or storm destroying the crop. Native labour is cheap and unaffected by the rulings of industrial courts. Land is cheap. There are no royalties. The cost of production has been reduced to a fine point. In New Zealand, on the other hand, all land has a considerable market value, and royalties have become unreasonably inflated by a period of prosperity. From these causes alone the millers are probably making less profit to-day when they receive £25 a ton for their fibre, than they made years ago out of £16 a ton. Labour, too, is expensive. Flaxmilling is one of the quasi-primary industries which have come within the cognisance of the Arbitration Court, and in some of the hemp-producing districts no wage less than 9s. a day is paid. This is, of course, almost a fatal handicap in competition with the product of native labour.

In spite of these disadvantages the New Zealand hemp industry has, since the beginning of the century, attained unprecedented proportions. The output in 1907 was the highest on record, more than double that of the boom year, 1890. The average price for the year, £29 10s. per ton, also constituted a record since the early days of the native-produced fibre. Moreover, while not interfering with the investment of capital, State control has produced conditions eminently favourable to the survival of the industry. After strong opposition, the Government

carried a Bill making it compulsory that all hemp entered for export should be graded and marked by a State official in the same way that butter is treated. The effect of this measure has fully justified the violence it did to the sacred principle of freedom in private enterprise. It removed once and for all the old evil caused by the export of poor fibre, badly dressed, to a market which was eager for the best. It was, in effect, the complement of a system which now provides that practically every hundredweight of New Zealand's staple products must receive the approval of the State before leaving for the markets of the world. There were protests against the detail of the system and the lengths to which it is carried, but the principle is now fully approved by the country.

It was the salvation of the industry. In face of the keener competition now instituted in the Philippines, the New Zealand fibre could not hope to live for any length of time if the abuses of twenty years ago were possible of recurrence. There is now the system of reporting defects back from the grading stores to the mills, so that no factory is working in the dark and none may be excused for perpetuating errors. Merchants in London and America are now able to purchase with confidence that the fibre will be good, well prepared, and within a few points of their requirements. They can feel assured, too, that *raupo* and the other rubbish of the uncultivated flax swamp is not imbedded in the heart of the bale. With this great evil removed, the industry will be much less liable to the fluctuations of the past. It has passed through endless vicissitudes, a monotonous alternation of booms and slumps, each boom greater than the previous, and each slump more precariously dangerous than its predecessor.

Upon the removal of these abuses and economies in working the future of the industry must depend. The old quest for machinery which will enable the flax to be dressed better and more cheaply is as keen as ever. The fact is established that cultivated flax will yield a



A FLAXMILL, WITH STACK OF GREEN LEAF.

better and more luxurious crop than the wild plant. The fibre is, however, a fine one, and capable of much higher treatment and more remunerative sale if the necessary processes can be devised. The time has arrived for specialising and economies, and to this end both the State and private investigators are giving their best efforts.

The following table, covering periods of ten years, indicates the steady growth of the hemp industry as it surmounted the disabilities of its infancy:—

Decennial Periods.	Export.	
	Tons.	Value.
1858-67	411	£10,401
1868-77	27,347	606,318
1878-87	12,600	219,965
1888-97	95,693	1,684,626
1898-1907	195,941	4,931,514
1907 (single year)	28,547	832,068

The fluctuation of prices in the past quarter of a century is shown below:—

					Average Price per Ton.		
					£	s.	d.
1881	...	...	...	...	20	0	0
1888	...	...	...	...	18	10	0
1889	...	...	...	...	21	0	0
1892	...	...	...	...	17	0	0
1897-8	...	...	...	...	11	0	0
1900	...	...	...	...	20	0	0
1904	...	...	...	...	26	10	0
1907	...	...	...	...	29	10	0
1909	...	...	...	...	22	0	0

As regards employment, the industry has expanded by only 33 per cent. since 1885, but in that period was the worst slump on record. In 1906 the machinery and plant of 240 mills was represented as being worth £120,000. The raw material was valued at £200,000 and the finished product at £557,800. The rope and twine works in New Zealand, which manufactured in the last year of enumeration 618 tons of rope and twine, use phormium and Manila in the proportion of about five to one.

CHAPTER VI

THE WOOL KINGS

Raw material for England—Wool from Australia—A staple product—The squatters—Sheep in New Zealand—The first large runs—Wairarapa and Marlborough—Selection of breeds—Increase of flocks—The revolution of refrigeration—Readjustment of the flocks—The merino basis—Breeding for mutton—"The Corriedale"—Natural increase of flocks—Shearing on a large station—A time of anxiety—Improvement in the clips—Where the wool goes to—Local manufactures—The arrival of the rabbit—A crisis—Eradication of the pest.

THE population of Europe was expanding with leaps and bounds throughout the period during which most of the Anglo-Saxon colonies were founded. The great drain of the Napoleonic wars had ceased. In the long ensuing period of general peace the requirements of Europe doubled and trebled over and over again. By the emigration of large bodies of men to countries beyond the seas their purchasing power was infinitely increased. The whole civilisation of the Middle Ages and later did not show another such period of expansion.

Coincident was the great industrial revolution which had its origin and strength in England. It converted the United Kingdom forthwith into the greatest manufacturing community in the world, and presently made it dependent on foreign countries for the raw material for its manufactures. Gradually the population of England gravitated to the towns. Much faster the manufactures of the towns, which were supplying a great proportion of the requirements of the world, became rapacious for raw materials from beyond the seas. On the flood-tide

of this demand, but in no way due to it, most of the British colonies were launched. The mere hope of living a freer and more independent life prompted most of the emigrants to go abroad, but behind it there was the comforting knowledge that the new countries were prime producers of exactly the products for which the English manufacturer was most rapacious. The colonies were the greatest beneficiaries of the economic needs of England in that period. But their capabilities differed widely. All could produce perishable food-stuffs, but only the nearest could hope to land them on the market. Most of them could produce timber, but for general purposes the resources of the Baltic and Canada, which were immeasurably nearer to the market, took preference. Most of them could produce wheat, but here again the nearer competitors had the advantage, and the more distant figured merely as supplementary suppliers.

Apart from gold, the single commodity for which there was a constant market was wool. For it the demand was insatiable and constantly increasing. It was practically the only demand that the colonies in their early days could set out in a whole-hearted manner to supply. Almost all breeds thrived, except where the desiccated bush of Australia or the cold altitudes of New Zealand necessitated careful selection, and for many years, before local manufactures were thought of, practically every pound of colonial wool went to London. In this trade the Australian wool clippers vied in fame with the old tea clippers of the China trade. But speedy transport was not exactly a vital consideration. It meant that the early clips skimmed the cream of the prices, but there was rarely any danger of a late cargo finding the market satisfied. Wool became the staple and the mainstay of every colony. In its name what licence was granted, what economic crimes were committed ! What injuries were inflicted upon the posterity of the colonies and upon the *hoi polloi* of the British race, to whom in equity the resources of the British colonies

belonged ! In the absence of any nationalism indigenous to the soil, and in the dominance which was secured to the capitalist classes first by the bureaucratic government and later by the high electoral qualification, the colonies were administered in subservience to the belief that they must always be dependent on wool for their prosperity. So far as Australasia is concerned, nothing occurred until the second half of the nineteenth century to shake this belief. The lands of the colonies were administered accordingly.

Petitioning the Imperial Parliament in 1837 for the redress of certain fundamental evils in the colonisation of Australia, the inhabitants of New South Wales boasted that the prosperous condition of their country was due primarily to wool. They wrote:—

“The present unexampled prosperity of the colony is chiefly to be traced to the production of fine wool, which is the staple export. From this source has proceeded its connection with the most ancient branch of British manufactures. It is the chief means of deriving from the natural pastures an immediate valuable return, which to-day is laid out upon the purchase of Crown lands.”

By this method extensive areas of pastoral land in all the colonies were rapidly assumed by the capitalists who arrived early. They “squatted” on the wide unpeopled plains and laid claim to an unfenced area for miles around. To a certain point the presence of these moneyed squatters was a great assistance to the smaller settlers of the labouring class. The great bulk of the money circulating in the colonies was either their original capital or the proceeds of the yearly wool clip. But the evils of the system more than counterbalanced the good at the point at which the smaller settlers, now independent of help, wished to take up small areas of land. By 1850 the more advanced of the colonies were given over wholly and entirely to sheep-raising. From Australia the fever spread to New Zealand. The equable climate was a great attraction to men who



SHEEP MUSTERED FOR SALE ON A NORTH CANTERBURY STATION.

periodically had their flocks decimated by Australian droughts.

On his second voyage to the Pacific Captain Cook landed a ram and a ewe at Queen Charlotte Sound (1773), but they died forthwith from browsing on a poisonous native shrub, and it was not until the beginning of the next century that sheep were actually acclimatised in New Zealand. The export of wool from the Mother Colony of New South Wales had grown to almost four million pounds before New Zealand was seriously thought of as a sheep-raising country. About 1835 adventurers from New South Wales, foreseeing the possibilities of the industry, swarmed across the Tasman Sea in their brigs and made such good progress in a species of squatting to which they gave the semblances of "purchases," that before the Queen's authority arrived, in 1840, they claimed to have purchased four-fifths of New Zealand from the native owners! Several for a few pounds' worth of "kind" acquired as much land as they could see from certain points of vantage. One astute gentleman had a documentary claim to an area which was bounded on two sides by rivers, on the third by the sea, and on the fourth by a line drawn as far back as he might think fit!

At first the new holdings were stocked with cattle, which ranged at will. For some years there were very few sheep in the colony: they were kept about the *whares* almost as personal pets.

The first sheep came across from Australia to Wellington in 1840, but the first sheep "run," as the large holdings were called, was started in the Wairarapa in 1844 by Mr. (afterwards Sir Charles) Clifford. The sheep were imported from Sydney, and after various attempts to find a track across the Rimutaka Mountains, were driven round the coast to the plains. Two years later, in conjunction with Sir Frederick Weld (afterwards Governor of Western Australia and Tasmania), Mr. Clifford landed some sheep in Marlborough and drove

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them southward to stock the first large sheep station in the South Island.¹

The small, hardy merino sheep, originally obtained from Spain, was the basis of the flocks of Australia. At first the breed was considerably debased by crosses with native sheep from South Africa and India, and the clips, judged by present-day standards, were shockingly poor. But in the forty years that elapsed before New Zealand commenced to draw stocks from Australia, the strains had been greatly purified and improved by the importation of fresh and pure stock direct from Spain, which at this time was one of the largest suppliers of raw wool to the English manufactories. Sir Charles Clifford's importations were immeasurably superior to the miserable animals upon which in 1803 Captain Macarthur based his predictions for the future greatness of Australia. In so far as they were affected by climatic conditions and pastures the sheep were an instantaneous success in New Zealand. By 1850 the Flaxbourne station was carrying upwards of 70,000 sheep.

But it was very soon discovered that in New Zealand the merino could be much better used for crossing purposes than as a pure breed. Run-holders, working independently of each other, began importing haphazard practically every breed of sheep that England possessed. Many of them were ruled out of consideration, on the experience of a few seasons, but New Zealand offered so many combinations of soil and climate that there was scarcely a single breed that would not thrive somewhere. The hardy little merino itself was in its element on the rougher country, from the snowline down to the edge of the plains. Elsewhere it appeared in crosses. The heavy Lincoln and the Romney Marsh

¹ Flaxbourne was acquired originally under lease from the Maori chief Te Rauparaha. It was worked by the Clifford family until 1904, when it was resumed by the Government for closer settlement. Mr. Clifford, who was first Speaker of the House of Representatives, was knighted as Sir Charles Clifford of Flaxbourne.

were found highly suitable for the deep, moist flats, and practically every other breed found a home in the lighter, drier, or poorer land, with such good results that the length of staple and weight of fleece were universally increased. The disadvantage of being so isolated from the great sheep-breeding countries was counterbalanced by the remarkably high percentage of natural increase. The climate of New Zealand, corresponding roughly with that of Spain and Morocco, is nevertheless so equable that it is never necessary to house sheep all through the year, and the mortality of the lambing season, in midwinter, is generally light. An increase of more than 100 per cent. is not infrequent. That has been attained by a North Island flock of 12,000 Lincoln ewes depasturing on land merely surface sown with English grass. A South Island merino flock of 15,000 on native pasture in the mountains registered 75·36 and 89 per cent. In good pasture where the country is more improved the results are generally better.

Within fifteen years of the first considerable importation of sheep the flocks of New Zealand exceeded a million and a half, and the export of wool amounted to $2\frac{3}{4}$ million lb. weight, and to almost half the total value of the exports. In spite of the low value of mutton during the greater part of the time, the flocks had increased to thirteen millions before the advent of refrigeration gave the industry its final fillip. The following figures belong to the days before refrigeration :—

			Flocks. No.	Export of Wool. Lb.
1858	...	...	1,523,324	3,810,372
1867	...	...	8,418,579	27,152,966
1881	...	...	12,985,085	59,415,940

At the enumeration of 1881 New Zealand had 6,300 flock-owners, of whom 576 possessed upwards of 5,000 sheep and 4,700 less than 500. In that year the flocks furnished two million lb. of wool to the local mills, supplied the mutton for home consumption, and con-

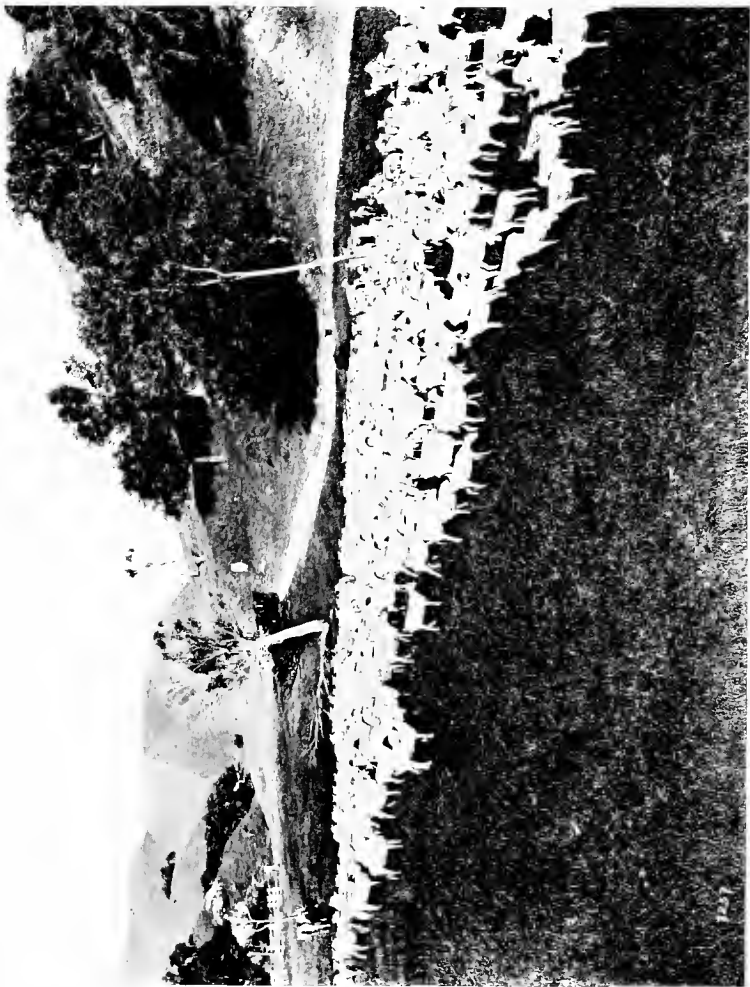
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tributed $3\frac{1}{2}$ million pounds to the total value of the exports for the year.

When, as explained in another chapter, refrigeration came to revolutionise the whole pastoral industry of Australasia, New Zealand was in possession of a very fine class of sheep, comprising some millions of pure-breds, both merino and longwool, and a majority crossed to serve the prime purpose of all sheep-raising at that time, viz., the production of fine wools. Now an entirely new element was introduced. Meat steadily became a more important consideration in sheep-raising, until to-day it stands second in the desiderata of the breeder. Even yet the revenue from meat does not compare with that from wool, but it is a more important matter to certain sections of the farming community. It yields a more universal revenue to the small farmer, and the income is spread over a longer period of the year than is the case with wool.

The new development caused an immediate and complete upheaval in the methods of breeding which had been evolved in the previous forty years. It now became necessary, while keeping as close as possible to the wool standards, to produce a sheep which furnished good mutton without too much bone, and early lambs. The natural desire of the farmer to produce weight irrespective of quality received an early check at the hands of the English consumer, who objected to coarse, over-fat carcasses. The result of the new dual-purpose breeding has been to eliminate gradually many of the county breeds which were considered good enough when wool was the only thing required. In the quarter of a century which has elapsed since meat-freezing became possible certain general principles have been reached, and these form the basis upon which the necessities of local conditions—climate and soil—are grafted.

The merino, upon which the New Zealand flocks have been built up, has always been a profitable wool-grower on the poorer back-country runs, and even to-day it reigns supreme there, on the uncultivated pastures. On



SHEEP ON A WAIRAKAPA STATION.

such stations wool furnishes, say, two-thirds of the revenue, the other third being the income from store sheep sold out for finishing off on the lowlands. On the intermediate estates, where there is some fattening and where wool provides only one-half of the revenue, different crosses are used. Finally, there are the highly improved farms, where rape and turnips are grown, and where two-thirds of the income is derived directly from the sale of fat sheep and lambs for freezing. Experience in the more successful mutton-raising districts, Canterbury, for example, has practically decided upon the Leicester—both English and Border—as the best cross for wool and mutton combined. It gives a smallish, meaty carcase, short and plump in appearance, and not nearly so liable as some other crosses to run to excessive weight. It matures early and gives a good return at an early age, as well as producing a good fleece of long-staple wool. On the whole, the Leicesters, as used in New Zealand, have proved the finest cross for the dual purpose of to-day. To them is largely due the reputation of that “Canterbury” mutton and lamb which figures as the prime imported meat on the English market, and which is often erroneously supposed by the English consumer to emanate from the neighbourhood of the English cathedral city. Three-quarter bred English Leicesters at four or five months old will weigh about 36 lb., and cut a fleece of 3 lb., one-fourth more valuable than a Down fleece.

For years past Australian breeders have been making important purchases of stud Leicesters from Canterbury with which to build up their flocks and contest the supremacy of the market. On the drier pastures of Otago the Border Leicester has been favoured, but the heavier and coarser Romney Marsh has been preferred for the rank, coarse-grassed pastures of the North Island and the cold, wet downs of Southland. Elsewhere in the North the Lincoln abounds. There are, of course, breeders who favour Shropshires, Southdowns, and Cotswolds. The growing competition of Australia has led to a gradual

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predilection for the Southdown, and Shropshire, which are, *par excellence*, the breeds for producing early maturing lambs.

The gradual improvement of the North Island pastures has tended to the elimination of the coarser breeds where the climate will permit, and at the present moment North Island farmers are for the first time using Southdowns with a view to producing early lambs to enter into direct competition with Canterbury.

Southern breeders, anxious to secure fixity of type in a good dual-purpose cross, have come to a very general agreement on a fourth cross of half-bred Lincoln-merino with Lincoln rams. This inbred crossbred, known locally as the "Corriedale," is in very general favour in Otago, but whether fixity of type can be maintained must be proved by experience.

At the present moment about nine-tenths of the flocks of New Zealand are cross-bred. The analysis for 1907 was as follows :—

Flock sheep—						Number.
Cross-breds and longwools	...	...	...	...	...	18,189,112
Merino	...	...	...	...	...	2,158,976
Stud sheep—						
Merino	...	...	...	...	...	60,719
Lincoln	...	...	...	...	...	111,506
Romney	...	...	...	...	...	174,667
Border Leicester	...	...	...	...	...	85,598
English Leicester	...	...	...	...	...	100,011
Shropshire	...	...	...	...	...	40,044
Southdown	...	...	...	...	...	19,509
Others	...	...	...	...	...	43,630
Total						20,983,772

The first doubts as to whether New Zealand would ever be able to find from year to year a million surplus sheep for freezing have long since been set at rest. The lambing averages from 45 to 80 per cent. on the native pastures and hill country, and upwards of 100 per cent. on the better lands, and New Zealand is steadily increasing her flocks in spite of an export which now amounts

to five million carcasses per annum and a steadily growing home consumption. The flock figures[†] show a steady aggregate increase, and the following table indicates the growth in the number of breeding ewes during the last ten years :—

							Number.
1898	...	...	...	...	...	...	8,445,012
1900	...	...	...	...	...	...	9,257,054
1902	...	...	...	...	...	...	9,610,149
1904	...	...	...	...	...	...	9,222,448
1906	...	...	...	...	...	...	10,479,187
1907	...	...	...	...	...	...	10,736,846

The yearly reduction of the flocks by export and home consumption has increased from 4,858,975 in 1900 to 7,039,314 in 1907.

Shearing time on any of the great New Zealand stations is one of breathless anxiety. It may be that the sheep have come through a severe winter. They may have been rescued twice over from marooning by flood ; they may have been saved by a few minutes from injury by a rapidly moving grass fire, or the ewes may have been put into sheltered pasture just in time to save the lambs from the relentless southerly wind. But shearing time, in all its brightness and warmth, is one of the most anxious seasons of the year. At the earliest sign of dawn the run-holder is scanning the sky for warnings of a shower that might possibly check the work. The sheds are full of sheep crammed in overnight to be ready with dry fleeces when the gas engine commences to explode impatiently at five o'clock. Shearers from all the back-blocks in the Dominion and Australia, and Maori from the villages they have kept close to all the winter, are ready on their boards, with the machines all cleaned and oiled, awaiting the signal bell.

Exactly at five o'clock it rings. Each man makes a rush into his pen, drags out a 70-lb. hogget, and upsets it on the shearing board. The strings are pulled : the

[†] See table, p. 138.

machines begin to buzz, and in a second from end to end of the shed they are purring through the fleece. When the Wolseley machines drove out the old-fashioned blades a good deal of romance deserted the shearing-shed. There is more of the noise of a factory now. The swift-running pulley, with its five or six hundred revolutions to the minute, and the natty oil engine look rather out of place in these distinctly rural surroundings, many miles from a railway or even a public road. But the sheep, the squatter, and the shearer all benefit. There is less cutting, there is more wool, and there is less hard work.

They are a strange lot of men who work in the sheds. Arriving here, it may be, after the big stations of Queensland and New South Wales are "cut out," they move from shed to shed as the clip proceeds. Some of these nomads are the most reliable men at the work. Their sheep are turned out smooth, shining, and whole. They regard a cut in a sheep's side as a personal insult to themselves. Plodding along quietly and rapidly, they are able, at a pound a hundred, to make 25s. a day. Half-way down the shed is a frequent figure in the up-country shearing-sheds—a foreign sailor, tempted by the cheques that the shearers are earning to forsake the tortuous ways of the sea. His average is low, and his sheep are badly shorn. They rear and kick in his arms because he cannot hold them, but when the eye of authority is elsewhere he will drive his left-handed machine still harder and try to catch up his mates.

It is early morning, and the men are going their fastest because the shed is nearly empty and each wants to cut out a good figure. The combs are shedding the fleece in long, bright swaths, more evenly than the old-time blades. "Fleece-oh!" comes from the far end of the shed. A tonsured sheep skips out of the door into the pen, the picker snaps up the fleece and runs along to the classing-table. With one cast it is spread out on the battens. Legs and bellies are picked off, and in a twinkling the fleece is rolled and thrown into the press.



SHEARING BY MACHINERY IN A WAIRARAPA SHED.

Meanwhile the shearers has scraped his comb and oiled his machine and the wool is falling in folds off the sides of the new-comer. "Fleece-oh!" echoes continuously from one part of the shed or another, and the pickers are kept busy gathering the fleeces off the boards and sweeping up. The pressing is the work of other men. It is an art in itself to get twenty bales a day tightly pressed, sewn, and stored away in the woolshed.

Suddenly an access of energy is apparent. The sheep are nearly finished and there is keen anxiety to get a good share of the last. "Sheep-oh!" cries a man whose pen and board are empty. One or two are driven along, and so the number dwindles. At last they are all on the boards and the enthusiasm dies a natural death. Competition is paralysed because there will be a spell before any more sheep come in. So the learners troop in and practise their amateur hands on the unfortunate last. Then the engine stops and there is rest. Machines are affectionately overhauled and oiled, tallies are made up, the shorn sheep are branded and passed out of the yard to make room for others. They skip through the gate, jump in the air in their unwonted nudity, and scatter over the paddock. By this time the warmth of the sun has brought the yolk up in the fleeces, and the sheep can be packed into the yards and shorn as quickly as the machines can go. All day the busy, bleating scene about the sheds continues. At last it is time to stop. The engine has ceased to perspire. Again the shed is crammed with sheep for the morning. The doors are closed. The shearers have gone to the *whare* for tea, and the squatter and his people have ridden off, a tired and satisfied party, for the homestead. In the evening the talk will be of weather, machines, and London prospects, and before the lights go out there will be a last anxious glance at the cloud-banks that are so pregnant of anxiety for squatter and farmer alike.

One of the most healthy features of intense sheep-raising in New Zealand is the manner in which the wool clip has been improved. The weight of fleece has

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gradually increased, while the value of the sheep for meat purposes has also been enhanced. Individual sheep have been clipped up to 25 lb, but the following figures are fair averages for the whole Dominion :[†]

Merino	...	...	...	...	...	4 lb to 7 lb.
Quarter-bred	...	...	...	...	...	6½ lb.
Half-bred	...	...	...	...	...	7½ lb.
Three-quarter bred	...	...	...	...	...	8½ lb.
Leicester	...	...	...	...	...	10½ lb.
Lincoln	...	...	...	...	...	11 lb.

The growth of the wool export from the earliest days is fairly represented in the following abstract :—

				Weight. Lb.	Value. £
1857	...	...	...	2,648,716	176,579
1867	...	...	...	27,152,966	1,580,608
1877	...	...	...	64,481,324	3,658,938
1887	...	...	...	88,824,382	3,321,074
1897	...	...	...	135,835,117	4,443,144
1907	...	...	...	154,384,568	7,657,278

Though Wellington has now actually a greater number of sheep than Canterbury, the latter province is naturally so richly endowed that it will probably for many years set the standard of quality for New Zealand meat. In 1886 the South Island possessed about twice as many sheep as the North, but the rapid development of the North effected an equilibrium in 1906, and now the flocks of the North are slightly the more numerous. The more intense occupation of the land has gradually eliminated the larger holdings and proportionately increased the number of flocks. In 1881, before freezing had become known or land taxation operated, there were 139 flocks of upwards of 20,000 sheep, and the average for the whole 6,857 in the colony was 1,887. In 1907, owing to various causes, the large flocks had been reduced to 87, and the average size of the whole 19,977 flocks in the colony was only 1,050 sheep.

[†] Authority, M. Murphy, F.L.S.

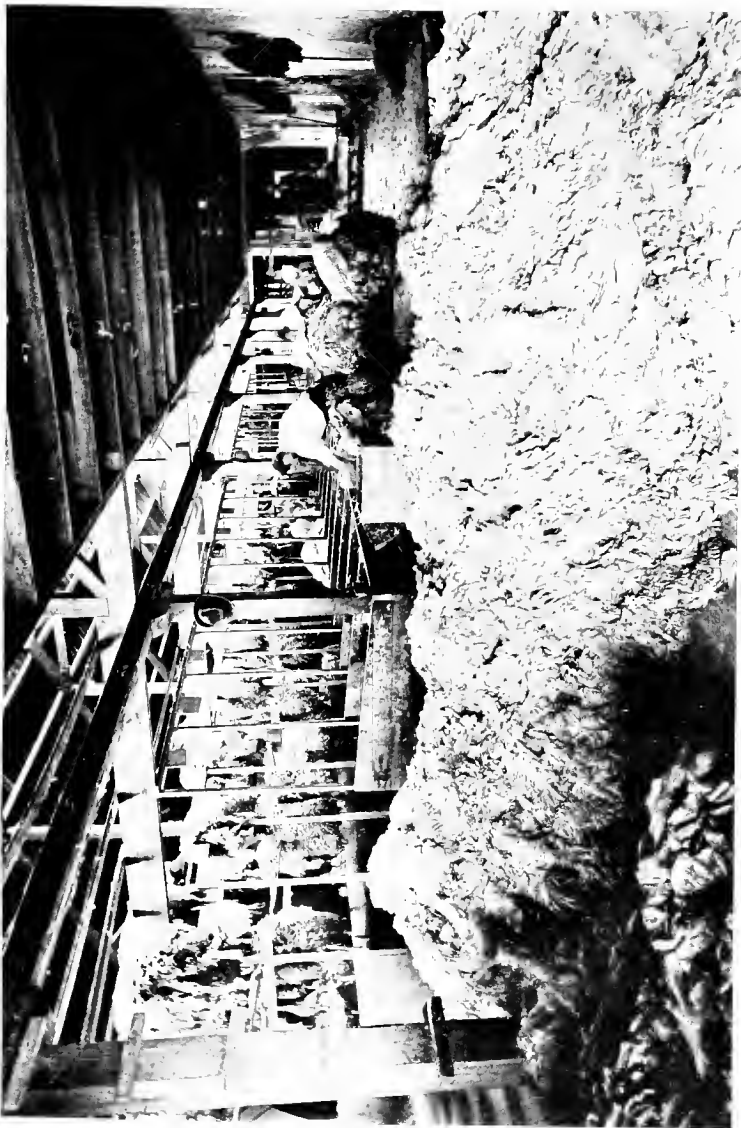
Until quite recently London was the destination of practically all the wool exported from New Zealand. In spite of strong efforts to open up new subsidiary markets as a stand-by in poor seasons, it has been found practically impossible to remove the centre of the trade from London. Thirty years ago samples of New Zealand wool were sent to China, and there manufactured into cloth of excellent quality, but nothing resulted. During the last few years, again, the altered requirements of the Japanese renewed the promise of a market in the East. But again the whole of the Japanese purchases, amounting to about five thousand bales in a normal year, are now drawn from the nearer field of Australia. It is improbable that for many years to come Japan or China will be large purchasers of wool, but the ultimate prospect is well worth working for.

But not all the wool produced in New Zealand is exported. The double freight on woollens imported from England was from the first an incentive to the establishment of local mills in the colonies. In 1882 New Zealand had three, and they were consuming two million pounds of wool yearly in the production of yarns, blankets, rugs, &c. To the freight disability of the imported goods has now been added the extra impost of a heavy Customs duty—in no case less than 20 per cent.—and under these favourable circumstances the local industry has expanded, until now there are ten mills, employing 1,600 hands and disbursing about £120,000 yearly in wages. The plant is in all cases quite modern, and the blankets, rugs, tweeds, and hosiery more than hold their own in competition with the best of the imports. In 1903 the consumption of wool locally amounted to five million pounds, but since then the competition of imported “shoddy” has caused a slight contraction. Though local manufactures are very popular in the Dominion, the exports of woollen piece goods are for geographical reasons practically nil. The industry prospers because of the quality of its product, the prices realised, and the varied elements of protection

which it enjoys. For much the same reasons it can never hope for a large market outside the Dominion. The fellmongeries and tanneries, which number one hundred, annually tan or salt $4\frac{1}{2}$ million sheepskins, the total value of the output being about two million pounds.

No narrative of wool-growing in New Zealand would be complete if it ignored the picturesque and heartbreaking episode of the arrival and departure of the rabbit. There are men alive to-day who can remember the advent in 1859 of two highly honoured and cherished guests—a pair of silver-grey rabbits. When they were liberated in Marlborough they were fondly protected in the hope that they would some day become acclimatised and furnish the jealously guarded sport that the English country gentleman so much enjoyed. They flourished forthwith. Men had been transported from England for poaching rabbits, and the owners of the two in South Marlborough made it known that an equally terrible punishment would follow any interference with them. Before many years the sheep pastures of New Zealand provided abundant sport for the gun. But in the thinly peopled country there was nothing to keep the “game” in check. Unharried by natural enemies, the rabbits multiplied at an alarming rate. In twenty years they were a positive menace to the whole sheep-raising industry. Whole provinces were overrun. The hillsides were alive with rabbits. Pastures were devastated, flocks starved, sheep-farmers ruined. Hundreds of thousands of acres in South Marlborough had to be abandoned. In Otago two million acres of sheep-country were surrendered to the rabbits. The owners had to start life afresh, for three rabbits consumed as much as one sheep, and it was useless to hope that the two could live side by side. The rabbits, being the finer grazers, outstayed the legitimate occupiers of the land, but eventually in many cases ate even their own pastures out of the ground.

The halo of virtue which protected the rabbit in the early days had long since been dispelled. When the



A CANTERBURY FELDMONGERY.

vanguard of the invaders approached the south the farmers made strenuous efforts to stem their advance. For some years they struggled courageously against an enemy they could not understand. Every farm and station kept an army of "rabbiterers" and packs of dogs. Gun, poison, trap, and dog waged a bitter war against the diminutive pest. Where the holdings were small the farmers often prevailed. Where they were large the rabbit won and the sheep-farmer retired, ruined and broken-hearted. In the rocky fastnesses and grassy hill-sides the rabbit was doubly fortified by the gorse bush—another pest which had been imported with levity and allowed to get out of hand. Hedgerows, river banks, and paddocks were fretted and permeated through and through with warrens. It was almost hopeless to try to eradicate the pest. In desperation run-holders imported natural enemies—stoats, weasels, and ferrets—and turned domestic cats wild. All alike failed in their purpose and themselves became pests in degree, while the wonderful fecundity of the rabbit suffered not at all from the competition. The harmless little pet had, indeed, brought the pastoral industry face to face with a crisis. The abandonment of some of the runs only intensified the evil for their neighbours. Some owners, foreseeing what would happen, thought of retiring for the time and allowing the scourge to work its own destruction. But Parliament could not allow men to shirk their responsibilities in such a crisis. Impelled by the exigencies of the moment to be drastic, it passed a law compelling all owners to clear their own properties. The unoccupied Crown lands were dealt with by the Government at great expense, and private owners were called upon to make simultaneous attacks on the rabbits within their own boundaries. It was punishable as a recurring offence to neglect to take the necessary steps, and in many cases the same owners were fined month after month for the same neglect. It was drastic, but the crisis demanded it. If a judgment was not satisfied within three months, the land could be seized and sold by the Public Trustee. The

natural enemies of the rabbit were protected, and it became an offence even to keep a tame rabbit in confinement. In some provinces, notably Hawkes Bay, the settlers exercised the option of setting up rabbit boards of their own and grappling with the pest out of a revenue derived from direct rating and subsidised by the State. The whole of their jurisdiction was fenced round with a rabbit-proof fence hundreds of miles in length, with permanently closed gates on the roadways and weirs to make the rivers impassable. And so, in their different ways, the settlers embarked on their long and disheartening warfare.

In 1878 the export of rabbit-skins was over three millions. Five years later it was 10 millions. As the destruction of the pest was gradually organised the exports increased till they reached their climax of 17 millions in 1893. In this period of ten years (1883-93) the wool clip increased by 50 per cent. Then the export of skins gradually fell off. The pest was conquered. In the less feverish fight of the next decade rabbits in a frozen condition became an important item of export. Three and a half millions were exported in 1907, and the value of both skins and rabbits was £120,000.

To-day the rabbit pest is completely in hand, and the injury to pasture and crops is comparatively inconsiderable. The experience of a quarter of a century has resulted in a complete organisation of the repressive measures. The holdings in infested areas are enclosed in rabbit-proof fencing, and migration being thus checked, it is a simple matter in case of emergency to apply severe repressive measures.

The ancient reputation of the animal with the golden fleece has been well maintained in New Zealand. Throughout the long days of the colony's infancy it was the sheep that brought practically the only grist to the mill. Other industries grew up with it, flourished, and sometimes decayed; but to-day the most assured source of wealth in the Dominion is still the sheep. More than half the annual exports are derived from its flocks. In

no country in the world are sheep more thriving and free from disease. Scab was eradicated twenty years since, and careful selection for localities has eliminated most of the other diseases to which sheep are liable. The constant culling of the flocks is an absolute safeguard against deterioration.

CHAPTER VII

GOLD-MINING

An early depression—The Australian “rushes”—Prospecting for gold—Discoveries in Auckland and Nelson—Dr. Hochstetter’s report—The rush to Gabriel’s Gully—Successful fields in Otago—Specialising the work—The river beaches—Starved for capital—Revival of quartz-mining—The romance of the Waihi—Cyanide treatment a magic force—Universal gold veins—Sluicing—Labour-saving machinery—The development of the gold dredge—Its use abroad—Growth of the gold output—A field for capital—Some paying investments.

FOR ten years after the proclamation of the new colony infantile troubles were still telling very strongly against its growth. Added to the economic difficulties of the time, the relations between the white settlers and the Maori were chronically strained and frequently ruptured. The 25,000 *pakeha* who in 1850 shared the country with twice as many natives—warlike, arrogant, and distrustful—were in no mood to withstand temptation to leave for other fields. It required some fund of courage to keep steadily down to the as yet unremunerative work of the pioneer without looking to right or left.

The colony was still being governed from England, and the wrangles between the New Zealand Company and the Imperial Government left the former with emaciated resources and utterly unable to provide work for the thousands of labourers and artisans who were almost dependent upon it. While things were so gold-fields of dazzling richness were discovered in the neighbouring colony of Victoria. Hundreds of the labourers in New Zealand, who could ill be spared, but who could not be tempted to stay, threw up their positions and their

interests, rushed across the Tasman Sea by the first ships, and made their way up-country to Bendigo and Ballarat. There was little inducement to attract new settlers to New Zealand in competition with the allurements of the Californian and Australian gold-fields.

So far no systematic geological survey had been made in the colony, but the Governor (Sir George Grey), a benevolent, far-seeing, and practical autocrat, determined that if the struggling colony could do anything to keep her population it should be done. A few men, affected with the gold fever, were already prospecting in a haphazard manner in the environs of Auckland, Wellington, and Nelson, and the Government, which was then located at Auckland, offered a reward of £500 to the first man who should discover a payable gold-field in the northern district. Within a week a Californian miner reported the discovery of gold at Coromandel, about forty miles east of the city. This was in 1852. By the end of the year three thousand diggers were on the field. Auckland was elated. The Government treated with the natives for the rights over the field, and mining camps sprang up at different points in the peninsula. But the ground was not rich enough. When it came to paying the licence fees which were necessary to meet the demands of the natives, only fifty men persevered. In six months the reward committee had to declare that the gold was not of a payable character, and consequently the reward was not earned. The whole output of gold until the field was abandoned was worth only £1,200, the largest nugget being a piece of quartz about the size of an egg, containing gold worth £10. This field, as a matter of fact, suffered from the chronic complaint of want of capital to conduct the development in an effective manner. When the work was resumed in 1861 Coromandel became one of the premier gold-fields of New Zealand.

The first traces of gold in New Zealand had been discovered in the Nelson province during Captain Wakefield's expedition from Nelson to Massacre Bay in 1842,

but people had not yet succumbed to the fever which was so fashionable after the palmy days of California and Bendigo, and the discovery was quite lost sight of. Some years after the Coromandel rush Nelson was again thrown into a state of excitement by the discovery of gold a few miles out. There was a rush, a disappointment, a retreat. In the following year—1857—gold was found at Aorere, in the same locality. It was worked with some consistency, and in spite of a partial abandonment a year later, it continued to give steady remuneration to the class of miners who were not to be enticed away by the more speculative attractions of Australia. The Nelson fields were never calculated to make rapid fortunes, but the report of Dr. von Hochstetter in 1859¹ showed conclusively that the veins well merited a more extensive system of digging. So encouraged, a number of companies embarked on the development of claims, and the province of Nelson has been producing gold in steady quantities for fifty years past.

Up to 1860 the colony had exported gold to the value of £135,000, and at that date almost every province was deriving small revenues from the output of fugitive workings. The gold fever was now in the air, and almost every white settler in the country occasionally left his work-a-day occupation to fossick for "colour" in the mountain-sides, on the river banks, and even on the ocean beaches. Still, up to 1860 there was no evidence of a single field in New Zealand that was likely to attract a great rush of people from abroad or to bring any great wealth to the country.

Hochstetter's reports to the provincial Governments were of the utmost assistance, particularly in Nelson and Auckland. But the event which finally proclaimed New

¹ Dr. Ferdinand von Hochstetter, then Professor of Mineralogy and Geology at the Polytechnic Institution at Vienna, was geologist to the Austrian scientific expedition in the frigate *Novara* in 1858. On the invitation of the provincial governments he spent nine months in a geological survey of New Zealand, the results of which were published in German in 1862 and in English in 1867.

Zealand one of the richest gold-producing countries in the known world occurred in Otago in May, 1861. For more than a decade past the streams of that province had been known to contain gold from which any miner, working steadily, could earn a comfortable livelihood. The people of Otago were not particularly anxious to see a gold-field opened up. They were quiet, agricultural Scots, and they did not at all relish the idea of being overwhelmed by an influx of miners from other provinces and other countries. But, willy-nilly, the rush came, the greatest New Zealand ever knew, when Gabriel Read, a recent arrival employed by Mr. John Hardy, C.E., at Tokomairiro, discovered in a tributary of the Tuapeka River, eighty miles from Dunedin, sufficient evidence of rich gold to warrant the Provincial Superintendent in declaring the district a gold-field. Within a month two thousand diggers were encamped at Gabriel's Gully, and doing well. Men flocked thither from all quarters. The modestly remunerative fields at Nelson and Coromandel were almost deserted. Within three months of the discovery an area of fifty-one thousand acres was declared to be a gold-field. Wardens were appointed, courts established, and a strong force of constabulary enrolled to escort the fortnightly convoy down to Dunedin.

In the middle of August the weekly output of gold amounted to 10,000 oz. The news spread with incredible rapidity and there was an unprecedented influx of people of all sorts into Otago. Commenting on the excitement, Hochstetter writes :—

“Diggers bound for New Zealand thronged in the streets and on the quays of Melbourne : sailors deserted from their ships : and speculators of every kind saw a new field open in New Zealand. Victorian papers from the middle of September, 1861, reported no less than twenty-three vessels, all bound for Otago, among them the best Australian steamers, and the most magnificent Liverpool and London clippers. It was calculated that this fleet would bring about twelve thousand persons,

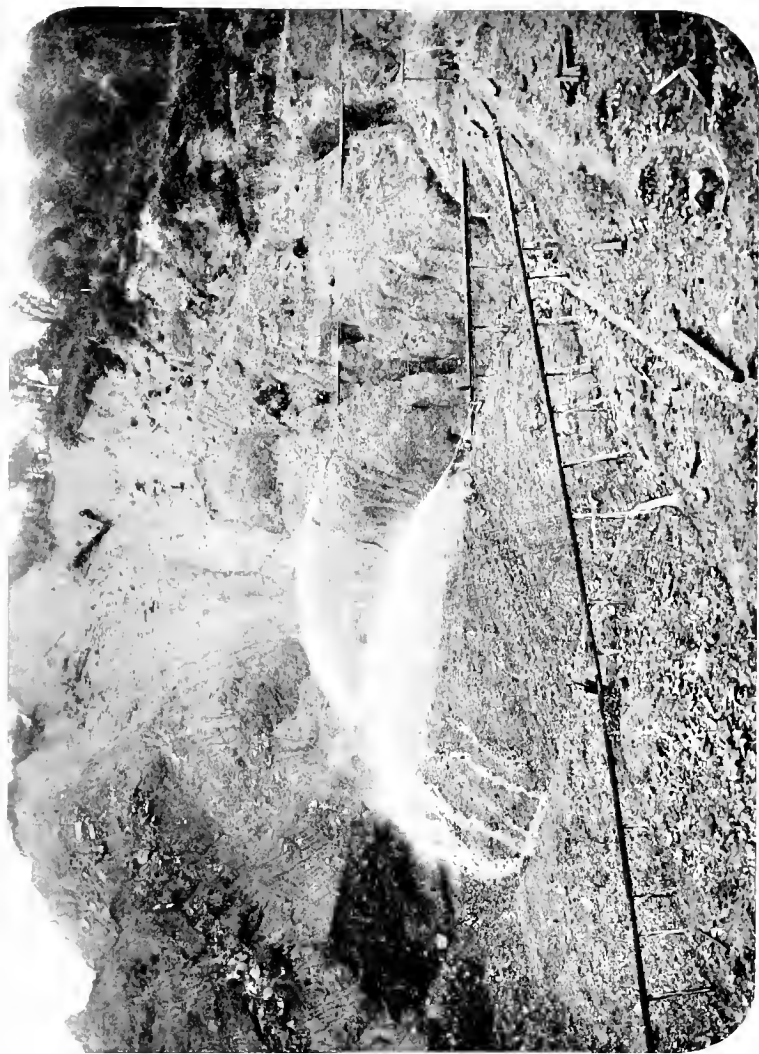
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which number would exactly double the former population of Otago. Not only gold diggers embarked, but also other enterprising men of all kinds, who hoped to secure their share of gold indirectly, were of the party. At the close of September the number of immigrants daily arriving from Melbourne was estimated in Dunedin at one thousand."

The population of the province increased from 12,691 in December, 1860, to 30,269 a year later, and to 79,000 at the end of 1863. Within nine months of Gabriel Read's discovery the field had produced 250,000 oz. of gold. In the following year two other Californian diggers, Hartley and Reilly, discovered very rich gold on the banks of the Clutha, a few miles below the town of Cromwell. In the same year half a dozen new and payable fields in the remote and rugged interior of Otago were opened up. Within four years of the first rush the floating section of the miners—always a considerable proportion—were drawn away to another part of New Zealand by the discovery of a payable field in Westland, where the numerous rapid and full-bodied streams rushing from the flanks of the Southern Alps down to the sea were found to be charged with the precious metal.

Thence onward it was yearly made more evident that New Zealand possessed not merely payable gold veins, but deposits which would give lucrative employment to thousands of men practically in continuity, that would give handsome investment to capital even at high rates of interest, and would, in season and out, return to the public and private exchequer millions of pounds per annum.

By the end of the sixties all the main fields of the colony had been located, and the output of gold was now valued at more than two million pounds annually. It reached its maximum of £2,844,517 in 1866, and for the decade 1862-71 was computed at £23,464,000, an average of something less than 2½ million pounds a year. From this point prospecting took more the form of following up known leads than breaking new ground. New



HYDRAULIC SLUICING IN SOUTH WESTLAND.

methods also found profits in deposits which the old had discarded. The hydraulic sluicing nozzle and the stamper are only improved ways of doing the old work, just as at later stages the alluvial dredge and the cyanide process have been employed to pursue the "wash" to the ultimate margin of profit. New and richer fields have been opened up in the Auckland province, but the old abandoned areas both here and in Nelson have again received attention, and have yielded profitable returns to the more economical methods employed.

The result of the first failures was the evolution of certain methods of gold-saving applicable to particular districts. The most characteristic class of mining has always been the saving of alluvial gold, which is strangely confined to the South Island. Four-fifths of the gold output of New Zealand has come from the South Island, where the great bulk of the precious metal is obtained from alluvial deposits. With rare exceptions all the streams—the full-bodied Clutha, Mataura, and Taieri, and the boisterous and treacherous torrents of the West Coast—all contain gold in varying quantities and degrees of fineness. On their banks the industry was first established by men who brought with them from California the dish and cradle, the pick and shovel of the "forty-niner." The output, though inexpensive, was quite suitable so long as the miner was not bound down by a large capital expenditure to work his particular claim to the finest point. Gold-saving so thorough and effective that the ground would not yield to reworking is quite a recent development. For twenty or thirty years after the first big rush the miners were generally working independently or in small co-operative groups, without any considerable outlay, holding themselves ready to throw up their claims at short notice and go elsewhere. Of the total output of gold up to 1873, valued at £27,000,000, by far the greater part was derived from the alluvial workings of the South Island, carried on under such conditions. Individual working was supplanted to some extent by co-operation, especially in the construction of races

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to bring the water to the drier terraces, and on the West Coast many miners were enabled to continue working by this means.

But gradually the easily-won gold disappeared from the ocean beaches and sand-banks of the rivers, which were literally lined when the first discoveries were made. The surface ground was more thoroughly searched, and men had to go to greater pains and prospect farther afield to get the returns they had been accustomed to. From 1871 onward the output of gold steadily declined.

By an unfortunate coincidence the shrinkage in revenue synchronised with the introduction of thousands of artisans from the Old Country. The Government did what it could to assist the miners by the construction of water-races and otherwise, but the time had come, in the natural course of events, when more expensive methods would have to be employed to win the gold, and when perforce the individual miner would have to look for employment under companies possessing the necessary capital. New quartz reefs and mineral lodes had been discovered which it was quite useless to endeavour to work except with the necessary expensive machinery. Many of them were taken in hand by limited liability companies formed in the colony, and not generally financed beyond the primary necessity of erecting plant. The method generally adopted was to crush the quartz in stamper batteries, and obtain what gold could be saved by passing the pulp over quicksilvered copper plates. While the oxidised stone lasted fair percentages of gold could be obtained : otherwise the bulk disappeared in the concentrates and tailings. The loss was out of all proportion. Very few of the companies had the means to go to lower levels for a further supply of quartz, and so the mines closed down.

This stage of mining development also coincided with the severest and most protracted period of depression New Zealand ever experienced. With the exception of large loans which the Government was expending in developmental works, money was very scarce. Capital

simply could not be obtained for mining ventures, and so large areas of auriferous land, which both before and since have yielded handsome profits, lay for the time abandoned. From 730,000 oz. yielded in 1871 the output of gold gradually sank to less than 200,000 oz. in 1890. The Auckland silver-mining industry, too, which in 1871 had produced 80,000 oz., sank in sympathy to its bed-rock level of 403 oz. in 1888. How critical was this period for many colonial industries is fully explained in other parts of this work. Mining depended almost entirely upon the confidence of financiers, and that could not now be secured unless the cost of production could be reduced by the introduction of new and economical methods. It was no longer a speculation but a business, pure and simple. That it would revive there could be little doubt. The prospecting and exploration of thirty years, albeit perfunctory and often unskilled, had established beyond dispute that a country more richly endowed with mineral wealth it would be hard to find. Coal, iron, copper, and all the precious metals had been discovered in almost every province. All that was required was a combination of science and capital.

The branch of the industry to which the application of these requirements was most urgently necessary was quartz-mining. Under the somewhat primitive methods employed by precariously financed companies a great proportion of the precious metal escaped, even in the oxidised zone. Below that it was seldom possible to carry operations. Tailings, concentrates, and slimes, which would have yielded splendidly to chemical treatment, were often discarded. At this time quartz-mining was only kept alive by a few bonanzas which happened to be well managed and to be paying good dividends. During 1877 the mines of the Auckland province were producing 9,000 oz. per month, and those on the West Coast of the South Island 3,000 oz. The withdrawal of capital, however, was the direct cause of a great slump in succeeding years, and by the end of the seventies less than 80,000 tons of quartz was being crushed in the

colony each year. For some years the Thames Drainage Board had been operating a large pump with a shaft 650 feet in depth to keep the deep-level mines dry. The closing down of this in 1878 greatly contributed to the mining depression, though despite this the Thames field was already by far the richest in the colony. The average crushings there gave a percentage of extraction more than twice as high as in the South Island, and yet it was believed that not more than one-third of the fine gold was being saved. The old field at Coromandel was one of the first to obtain a good supply of English capital, and its progress was forthwith rapid and sound. One after another the great mines in the Auckland district passed into better hands, capital was applied, and their progress was assured.

To the depression succeeded another period of boom and speculation. In one claim the amount of gold in the lode was so great that it had to be cut out with a chisel. Shares bounded up in value. In twelve months the shareholders received dividends amounting to more than half a million pounds. But in this case the shoot was only a patch, and by and by the bright prospects of the mine faded.

The most fascinating story of the Auckland gold-fields is that of the Waihi mine, the bonanza *par excellence* of Australasia. Mining commenced in this neighbourhood in 1882. The State aided the prospectors, and the result was the discovery of the Martha reef. The most up-to-date machinery was installed, but four years' working yielded an average of only $4\frac{1}{2}$ dwt. to the ton. In an adjoining claim the Waihi Company commenced working a different lode, and to a prospect of 10 dwt. to the ton sank shafts, constructed levels, and erected Globe mills and amalgamating plant. This machinery was shortly afterwards replaced by sixty heads of stampers, with kilns for roasting the ore as it came from the mine. Even with this equipment the Company was losing much of the gold and 50 per cent of the silver, but it had the foresight to stack the tailings in view of the promising

experiments with the new cyanide process of separation. Before the undoubted success of that process had been established the Martha Company sold its property to the Waihi at the price of a failure. The cyanide process revolutionised the whole position. Its success was instant, and to-day the Waihi is the finest mining property of its size in Australasia. Indeed, to quote "The New Zealand Handbook": "There are few mining companies in the world equal to it when the number of lodes and dimensions come to be considered." In the contiguous claims owned by the same Company there are sixteen distinct lodes, six of which carry highly payable ore. The largest, the original Martha, is 200 feet in width on some of the levels. Last year (1908) nearly 400,000 tons of ore body was taken out of the mine, and the dividends and bonuses amounted to £420,000. In eighteen years bullion to the value of over seven millions has been taken from the mine, and in sixteen the shareholders have received over three millions in dividends and bonuses. There are three crushing batteries with 350 heads of stampers, the whole of the machinery being driven by water-power. When the Waihi acquired the property of the Martha Company its own share capital was worth £22,500; to-day it is nearly five millions.

The Waihi is now surrounded by smaller companies hoping to share its success, though several of them are not financially equipped to carry on the work on anything like the same scale. The Talisman mine, at Karangahake, is now the second gold-producer in New Zealand. The Waiotahi at Thames for many years yielded from £18,000 to £20,000 per month. But this little cluster of properties cannot be said to be typical of many. There are thousands of acres of ground in New Zealand capable of returning a consistently good profit for many years, but there is not a large area, so far as is known, that would exhibit such successes as the Waihi. The future lies in working at deeper levels than have yet been touched. The lowest in the Waihi mine is 1,020 feet, and there the ore bodies continue to maintain their values.

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The cyanide treatment came into very rapid favour in New Zealand. Hundreds of young men engaged in mining had gone through a scientific training in the mining schools of the colony, and when the new process was introduced by the Cassel Company in 1889 they were at once able to apply it. The effect was remarkable. Companies that had been losing money by passing half the gold out with the tailings were at once able to make a profit. In four years 52 per cent. of the gold and silver output of the North Island (where mining was almost entirely by quartz-crushing) was won by the cyanide process. In 1897 the allocation of the gold won was as follows :—

Cyanide	...	...	...	...	67·72 per cent.
Amalgamation	...	...	...	...	31·53 "
Chlorination	...	...	...	...	0·75 "

Old tailings abandoned years back were treated with a handsome profit. Comparatively poor ground could be made to pay, and it became much easier to finance mining propositions. To bring the process within the reach of smaller companies, the Government purchased the rights for New Zealand and recouped itself the outlay (£10,000) within eight years by charging a small royalty. Thereafter it became free.

The principal centre of quartz-mining in the South Island is at Reefton, where one of the most valuable groups in the Dominion is owned and operated by the Consolidated Goldfields of New Zealand. Some of the workings here are down to 1,500 feet. The Keep It Dark, with a paid-up capital of £6,208, has won £450,000 worth of gold, and paid upwards of £160,000 in dividends. In the whole gold output of New Zealand since the commencement of mining quartz-crushing has only accounted for one-fourth, but at the present time it is by far the most important branch of mining. In 1907, 65 per cent. of the whole output was from quartz-mines, and of this seven-eighths was from the Auckland province.

Alluvial gold is the specialty of the South Island, and occurs from end to end. A scientific examination of seventy outcrops of alluvium taken from different parts of the island from Foveaux Straits to Cook Straits showed that every one was gold-bearing. When the miners first adopted sluice-boxes as an improvement on the primitive tub and cradle with which they separated the gold from the dirt, all the "wash-dirt" had to be thrown into the boxes. On suitable terraces this method was supplanted by ground-sluicing, the gravel and sand being washed by the current of water from a nozzle down a rough channel in which the gold particles lodged. The hydraulic elevator, a simple and cheap apparatus, introduced in 1880, revolutionised ground-sluicing by making it possible to raise the deposits as much as 170 feet for the extraction of the gold. There are several dozen companies in New Zealand dealing effectively with alluvial ground by this means. Hydraulic sluicing and elevating represented almost the first activity of the small companies and groups of miners who succeeded to the original individual miners. To-day there are companies operating on every scale, from a capital of a few thousand pounds upwards. Both in Otago and Westland there are wide auriferous areas awaiting development, besides the worked-out fields, which will repay another treatment. The water supply of New Zealand, which is practically inexhaustible, enables sluicing to be carried on cheaply throughout the year. Certain of the great lake reservoirs in the Southern Alps will probably before long be tapped by races to open up new areas in the West Coast fields. At the present moment, inclusive of Government water-races, there are upwards of 12,000 miles of channels, supplying 35,000 heads to the alluvial workings. Three of the largest sources of supply are administered by the State. With the rough exception of Canterbury and the south of Marlborough, the whole of New Zealand affords finely situated alluvial terraces for sluicing operations.

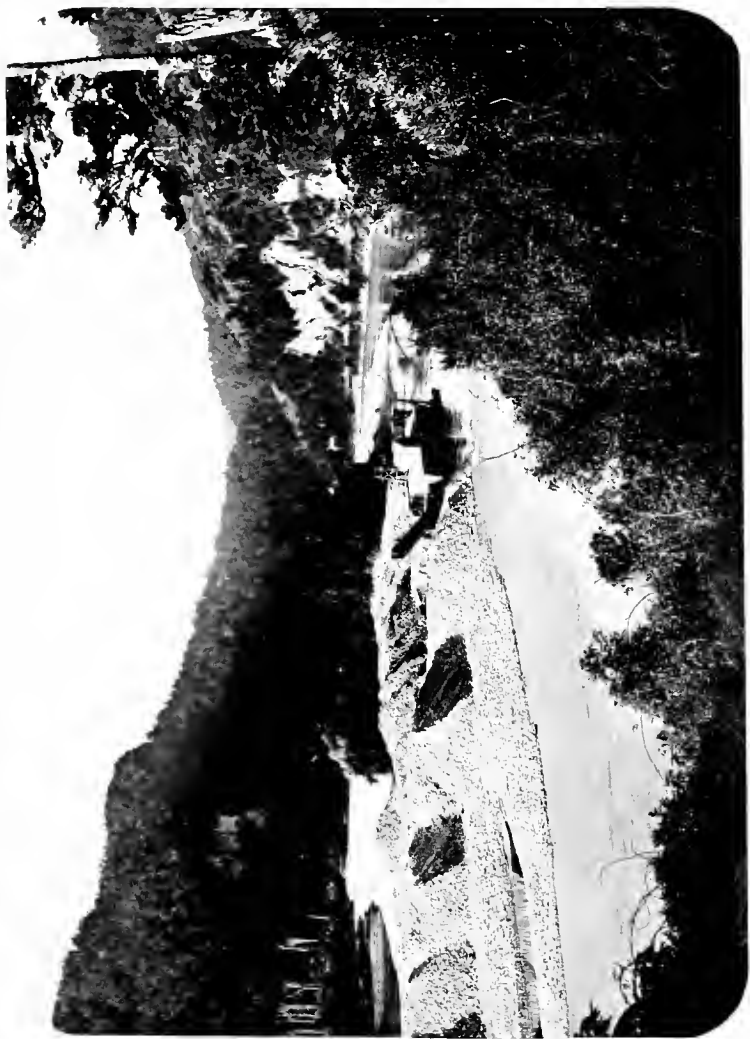
Taking sluicing and dredging together, alluvial mining

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in New Zealand now employs less than half as many men as thirty years ago, but at that time there were 3,500 Chinese miners on the fields, as compared with less than one thousand to-day. The decrease is largely due to the use of labour-saving machinery, as a result of which the output of gold in the period 1900-5 was almost double that of the period 1880-5, whereas the number of men employed was less by 25 per cent. By means of machinery the output per man was increased in the period from 18 ounces to 42 ounces. In 1880 the product of the sluicing claims was 104,382 ounces; in 1905, 167,503 ounces.

Alluvial mining took a most interesting turn about twenty years ago. A subsidiary industry of an entirely new description had its birth in New Zealand, and has spread thence to almost every country in the world where alluvial gold is to be found. At the root of the new departure was the aggravating impossibility of following up the veins of gold when they found their way into the rivers. Such a stream as the Clutha, which discharges more than a million cubic feet of water per minute, brings down from its cradle fastnesses untold quantities of the precious metal, much of which has found a temporary resting-place in or below its bed. The prospecting miners made an easy competence in saving the gold from the exposed river-beaches. Canvas towns sprang up like mushrooms on all the terraces, but the rise of the river in the warm days of summer submerged the beaches and repulsed the gold-seekers. Thousands of veins were followed down into the stream, until the strength of the current forced the miners to desist. Some of the more pertinacious cast iron scoops into the water, and dragged ashore supplies of the gravel, which were soon despoiled of their valuable content. Then scoops were laboriously worked by hand from floating pontoons—the origin of the spoon dredge—and then again, about 1868, the current of the river, acting on stern wheels, was used to supply the working power.

While these experiments were proceeding the tre-



A GOLD DREDGE ON THE BULLER RIVER, SHOWING THE TAILINGS.

mendous amount of tailings which alluvial miners were shooting into the streams higher up formed a stratum over the auriferous gravel and rendered the scoops useless. This compelled the ingenious miners to the adoption of the bucket-and-ladder type of dredge now so generally used in harbours. The current wheel had a very restricted utility. It was useless in eddies and backwaters. In 1881 steam was first employed to drive the machinery, and thence onward river dredges have been constantly improved. To-day Otago is the seat of a new industry, conducted with absolutely efficient and highly scientific machinery. In Dunedin the construction of dredge machinery is an important branch of engineering, upon which the lessons of a quarter of a century's practical experience have been brought to bear. Year by year the possibilities of the new method became more pronounced. Claims were pegged out in the most inconceivable positions. At an early stage the work, commenced in the rivers, was extended to the dry flats. Then, in 1894, an elevator was invented which enabled the dredges to dispose of their tailings from apparently inaccessible positions. At present there is scarcely any description of moderately flat land or river-bed which cannot be negotiated and thoroughly exploited for its gold content.

The "wash-dirt" raised from the bottom passes from the buckets through revolving perforated screens and thence on to the saving-tables, the tailings emerging at the stern of the dredge and into the elevator. The modern dredges generally derive their power from electricity, and replace the expensive screens by shaking-tables, on the principle of the old cradles.

Dredging was properly launched as a business enterprise in 1889 by a wealthy Chinese merchant. His claim on the Big Beach, Shotover River, in the heart of a precipitous and apparently barren country, was a complete success. In an incredibly short time small companies were started all over the province. Dredges of the best description cost only a few thousand pounds, and within ten years two hundred were at work in Otago

and Southland. From Otago the new industry spread to the rivers of the West Coast with their swift currents, and dredges were actually constructed to deal with the auriferous shingle on the ocean beaches. Many of them failed on account of original sin. The claims had been "salted," and "wild cat" schemes had been capitalised. Largely by means of such flotations the number of dredges in Otago and Southland amounted in 1900 to 230. At present there is no boom, and the dredges which are actually working—150 in all—are on a business footing. In 1907, 128 dredges yielded gold to the value of £419,364, a handsome average of £3,278 per dredge. Up to date alluvial dredging has been the means of saving gold in New Zealand to the value of £9,000,000. Some have been phenomenally successful. The Electric, with a paid-up capital of £26,000, has returned its shareholders more than five times that sum in dividends. The Hartley and Riley has returned £100,000 for £6,300, and so on. Sixty-eight companies in Otago and Westland, representing a paid-up capital of £332,490, have paid more than twice that amount in dividends.

From New Zealand the gold-dredging industry has spread to almost every country where alluvial gold is to be found. A number of dredges constructed in New Zealand were exported to Russia and Siberia, and New Zealand dredgemen and engineers have constructed and are working dredges to-day in Borneo, India, Burma, Australia, East and West Africa, China, Siberia, California, Tierra del Fuego, Brazil, &c.

According to the last enumeration of industries, in 1906, the growth of the gold-mining industry since 1890—that is, before the present industrial period commenced—is thus represented:—

QUARTZ MINES.

			1890.	1906.
Number	...	...	135	88
Employees	...	...	1,971	3,869
Value of machinery	...	...	£241,745	£1,040,104
Value of output	...	...	£278,893	£1,272,375

HYDRAULIC MINING.

		1890.	1906.
Number of works ...	...	74	93
„ dredges ...	...	—	139
Employees ...	...	495	1,815
Value of plant ...	...	£154,270	£733,624
„ of output ...	...	£73,713	
„ of sluicing ...	...	—	£135,618
„ of dredging ...	...	—	£531,112

Gold-mining now contributes about two millions sterling to the annual exports of New Zealand, and the amount is much less liable to fluctuation than before the days of specialised industry. The industry is more thoroughly understood than formerly, and the reserves in prospect make it highly improbable that there will ever be a serious shrinkage in the product. There are known deposits and veins which will keep the present plant well employed for many years ahead, and beyond that there is the new epoch of deep-level mining and the exploration of the vast areas—now covered with forest and inaccessible for lack of roads—in which many of the richest veins and lodes have their origin. Gold and silver alone have already yielded £75,000,000 to the wealth of New Zealand, and they can confidently be relied upon to continue their bounty for decades to come. The following periodic figures fairly illustrate the growth of the output:—

Gold.			Silver.		
	Oz.	Value. £		Oz.	Value. £
1858 ...	13,533	52,443	—	—	—
1868 ...	637,474	2,504,326	—	—	—
1878 ...	310,486	1,240,079	23,019	5,759	
1888 ...	201,219	801,066	403	72	
1898 ...	280,175	1,080,691	293,851	33,107	
1908 ...	506,447	2,005,109	1,731,177	175,337	

Up to the end of last year (1908) the gold export amounted in value to £73,534,087, and the silver to £1,266,088.

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The following table shows the gold output of Australasia for the last three years :—

	1906. Fine oz.	1907. Fine oz.	1908. Fine oz.
Western Australia	1,794,547	1,697,553	1,648,505
Victoria	772,290	695,576	676,005
Queensland... ..	544,636	466,476	461,359
New South Wales...	253,987	247,363	224,792
Tasmania	60,023	65,354	60,712
South Australia ...	14,077	11,871	9,162
New Zealand	534,617	477,312	471,790
Total	3,974,177	3,661,505	3,552,325

Although silver began to figure in the returns as early as 1869, the miners had not the necessary knowledge to recognise argentiferous ores when they saw them. It was not discovered until about 1885 that a large percentage of the silver in the gold reefs was in the form of sulphides, tellurides, &c. Previously the separation had been left to the banks which bought the gold, but henceforth the young miners educated at the Schools of Mines in the colony were able to treat the ore properly, and extract the silver from the huge quantities of ore that were formerly thrown over the mullock tip. The Auckland mines gradually developed a large silver output which in 1904 for the first time exceeded one million ounces.

In spite of a modicum of those wild-cat schemes which blight the mining history of every auriferous country, capitalists have no cause to complain of New Zealand as a field for investment. Up to 1905, when the paid-up capital of the quartz-mines of the Dominion was £1,576,829, the total value of the product was £6,291,917. There have been failures, of course, but they have been insignificant compared with such successes as are mentioned in the following paragraph :—

“Four companies in the Hauraki mining district paid upwards of £400,000 in dividends during the past year

† From the “New Zealand Mining Handbook,” edited by Mr. P. Galvin, Secretary of the State Mining Bureau.

and one company, the Waihi, has disbursed upwards of £2,000,000. The group of mines worked under the management of the Consolidated Goldfields of New Zealand, at Reefton, have paid £125,487 in dividends, as against a subscribed capital of £242,378; while the Progress Mines of New Zealand—an offshoot of the Consolidated Goldfields—has disbursed in dividends £226,875, against a working capital of £50,000. The Keep It Dark mine, Reefton, has paid £145,666 in dividends, or at the rate of £7 5s. 8d. per share, while only £6,208, or at the rate of 6s. 2½d. per share, has been called up.”

Of an earlier stage of the industry the same authority remarks:—

“Hunt’s Shotover Claim gave £40,000 apiece to the four original discoverers, and afterwards paid £15,120 to the shareholders in the Company that purchased it; the Long Drive Company disbursed £82,000 in a few years; the Golden Crown Company paid £141,904 irrespective of a large amount divided by the original shareholders; the Caledonian Company paid £553,440 during the first year of its existence; the Cambria Company paid in one year £48,825; the Moanataiari Company disbursed £117,993; the Nonpareil Company, £14,670; the Kuranui Company, £41,277; the All Nations Company, £41,445; the Cure Company, £17,000; the Manukau Company, £15,750; the Old Whau Company, £11,650. In later years the New Prince Imperial Company paid £60,750 in dividends in three years from a mine that was sold for £800. Even as late as last year (1905) the Waiotahi, which has been a consistent dividend-paying Company during the past thirty years, disbursed £51,000 in dividends. In Otago it is currently stated that the Bendigo mine, near Cromwell, paid £70,000 apiece to the five original owners. In the Inangahua district the dividends paid by quartz-mining companies from 1881 to 1905 inclusive amounted to £734,200, as against £486,220 capital called up.”

CHAPTER VIII

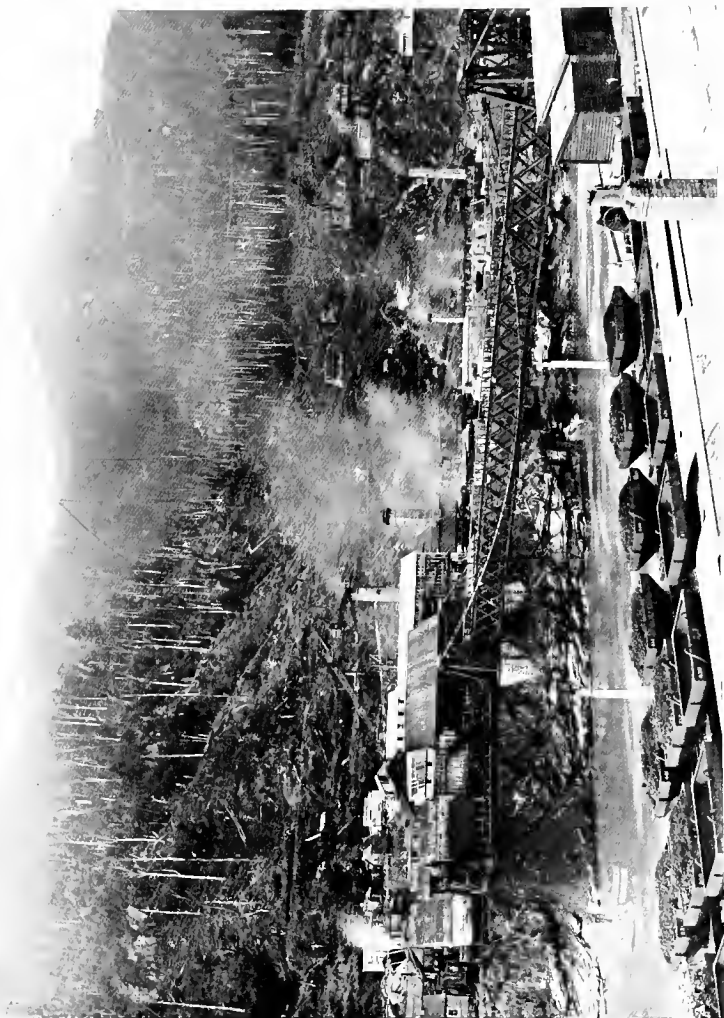
COAL AND OTHER MINERALS

Ubiquitous coal measures—Neglected development—Bunker coal from New South Wales—West Coast seams discovered—Imports from Australia—Obstacles to development—Improving the bar harbours—Mines opened on the West Coast—An export trade—The coal that saved the *Calliope*—Admiralty contracts—Expensive production—Modern equipment—The visible supply—The State coal-mines—Effect of State competition—Growth of the industry—Iron ore in vast quantities—*Kauri* gum-digging—The Austrian diggers—A dying industry.

To say that every householder in New Zealand is within reach of coal of first-class quality is no exaggeration of the fact. In evidence of pristine forests more vast even than those which the *pakeha* found on his arrival, coal measures of unlimited extent underlie practically the whole land surface of both islands. In many localities coal is so plentiful and accessible that individual farmers mine it for their household use.

"Perhaps in no country in the world," says Dr. Bell,¹ Director of the Geological Survey, "is coal more generally distributed than it is in this colony, as it occurs in almost every part—a fact which makes up for the narrowness of the coal seams and the inextensiveness of the basins in which they lie, as compared with coal deposits in other parts of the world."

¹ J. Mackintosh Bell, M.A., Ph.D., F.R.G.S., leader of Canadian Government's expedition to Great Bear Lake, 1900; leader for Lake Superior Power Company of James Bay expedition, 1901; geologist to Lake Superior Power Company, 1902; leader of Ontario Government expedition to Moose River Basin, 1903; Ph.D. Harvard, 1904; Austin Teaching Fellow and Proctor, Harvard, 1903-4.



BRUNNER, A COAL-MINING TOWN IN WESTLAND.

The best quality measures are those on the western slope of the Southern Alps, bituminous coal of varying purity. In the Otago province are lignites of high quality, in Canterbury less highly carbonised. The measures of the North Island are generally in the intermediate state of carbonisation. Anthracites occur here and there, but no extensive seams have yet been exploited.

Although their existence was vaguely suspected so far back as 1840, all these splendid measures lay practically undisturbed for twenty years after the foundation of the colony. Most of the early settlements were surrounded by a plentiful supply of wood which could be had for the gathering. As this gave out desultory prospecting and working produced sufficient coal to make up the deficiency. But with the sixties the requirements of the colony became more specialised. There were certain incipient industries which required coal; there were a quarter of a million people in the country, and above all coal was a pressing need to fill the bunkers of the steamships which were now beginning to find their way to New Zealand over the wide coalless waste of the South Pacific. New South Wales had already been impelled by her more advanced development to open up the excellent seams on the Hunter River, and hence was derived a portion of the bunker coal supplied to the oversea shipping in Pacific waters. The great bulk was obtained from England and America and carried round the world at great expense.

Here and there the necessity for opening up coal-fields led to the discovery of gold, a new and dazzling diversion which then stood inexorably in the way of the more work-a-day industry. Almost as soon as Von Haast had announced the discovery of the most valuable coal measures in the colony¹ gold was found in another

¹ Mr. J. Mackay, F.G.S., had discovered coal seams at an early date on the western slopes of the Southern Alps. Dr. J. von Haast, the Provincial Geologist of Canterbury, on a prospecting expedition in 1860, definitely ascertained the extent and the extraordinary value of the Grey and Buller seams, which are to-day yielding the most valuable coal in New Zealand.

locality, and for more than ten years the superior attractions of the gold-fields made labour scarce and expensive. Then again coal-mining involved the investment of capital, and as yet the country was so torn with political dissensions and burdened with the weight of costly wars, that capital came in very small sums and only to cautious, approved undertakings. The investigations of Dr. von Haast and Sir James Hector had the effect of thoroughly reassuring the colonials as to their own domestic supplies of coal. It appeared even then that the New Zealand beds extended over an area of half a million acres, and that much of the coal, particularly on the western slope of the Alps, was equal to the best British for steaming, gas and household purposes. The inferior lignites, though not suited for steaming except with a mixture of the better qualities, were excellent for local purposes, and placed the individual settler independent of any importation.

But the tardy supply of labour brought other difficulties in its train. The demand for the better quality bituminous coals, which were only to be obtained on the west coast of the South Island, grew to considerable proportions long before the coal was on the market. Local industries in the principal towns and the requirements of the rapidly expanding oversea shipping had to be supplied, and this could only be done with the assistance of a steady and considerable importation from New South Wales. When at length labour was forthcoming the native industry was further retarded by the treacherous and difficult nature of the harbours through which the coal had to pass to reach the markets of the colony. Overland carriage was out of the question, since the impassable barrier of the Southern Alps hemmed the coal-fields in by the sea. All the West Coast harbours are situated at the mouths of swift rivers with bars difficult to negotiate, and the coast during the gold-mining days was strewn with wrecks. If the coal had been less valuable the circumstances which conspired against its working would have been fatal.

The chief mines which were opened in the early seventies repeatedly changed hands, and it was not until well on in the eighties that improved harbour facilities gave the industry a definite hope of success.

In 1878, the first year for which records are kept, New Zealand produced 162,218 tons of coal, and the imports, which still included the only first-class coal available for some of the centres of population, amounted to 174,148 tons. From that time, however, the proportion gradually changed. The companies steadily overcame their initial difficulties, and in an incredibly short time the native product took its place in supplying the wants of home consumption and shipping. The moment gold receded from its speculative position the ultimate success of coal-mining was assured. Almost as soon as the West Coast mines were able to supply coal in large quantities the demand for shipping coal increased with leaps and bounds owing to the inauguration of the new steam services for the carriage of frozen meat. From 1878 to 1881 the output of the New Zealand mines increased from 162,000 to 337,000 tons, while the imports of coal fell from 174,000 to 129,000 tons. A new company in 1881 opened mines at Coalbrookdale and Granity Creek, which in a few years were the largest producers in the colony. Steamers suitable for the bar harbours were obtained, and the harbours themselves were so improved that whereas in 1880 only 200 tons of coal could be carried out of the Grey in a single bottom, in 1885 a vessel took out 900 tons. By now the mines were able to cope with the requirements of the home market and it was expected that the industry would receive a check. But in succeeding years the development of home industries and the requirements of shipping further expanded, and the new seams on the West Coast earned such a reputation for quality that New Zealand coal actually commenced to be exported to all parts of the Pacific seaboard.

In face of the difficulties of transport, which were still serious, the New Zealand product made a demand

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beyond its own borders long before the consumers of the colony themselves could dispense with imports from Australia. In view of the peculiar configuration of the country many localities found it cheaper to import this class of coal from Australia than to get it from the West Coast. At this time the heaviest load ever taken across the bar at either Greymouth or Westport was only 900 tons, and this was regarded as an isolated success; whereas at Newcastle, the chief coal port of New South Wales, where all the most modern appliances were in use, a vessel could with ease take 3,000 tons. And the coal was carried across from Australia at cheap rates by vessels which would otherwise make the voyage empty. Thus it happened that in the fifteen years 1885-99, a period in which the mines of New Zealand were in full working order, the imports of coal still exceeded the exports by 600,000 tons. The proportion, however, was daily becoming less marked. The right balance was struck in 1901, and since then the exports have steadily out-balanced the imports, their progress being *pari passu* with the improvement of the coal ports. Apart from this difficulty, the coal measures of the West Coast are admirably accessible. Though in densely wooded country—a condition in itself favourable—the most remote of the workings are within a few miles of the seaboard, and in every case they lie high above sea-level, thus enabling the coal to be lowered by gravitation and saving a great deal of expenditure.

Any doubts that may have existed as to the steaming qualities of the West Coast coal were set at rest by the historic escape of H.M.S. *Calliope* in the great hurricane that devastated Samoa in 1889. A squadron of United States and German warships and the *Calliope* were lying in the harbour of Apia when the storm commenced. It blew with rapidly increasing fury, and all the vessels got under steam to ease the strain on their anchors. The *Calliope* alone, with her bunkers full of Westport coal, was able to make headway against the hurricane. Slipping her cable, she forged slowly

ahead in the teeth of the gale and, with the encouraging cheers of the American sailors ringing through the storm, reached the open sea. Next morning the beach was strewn with the wreckage of all the German and American warships. Since then the British Admiralty has been a constant user of New Zealand coal, both on the Australian Station and as far abroad as Singapore and the China Station. For some years specially constructed Admiralty colliers ran regularly from Westport to Hongkong and Wei-hai-wei. Coal from the Westport mine also reached the ports of San Francisco and Valparaiso and other places on the Pacific slope of America.

It must be candidly confessed, however, that the cost of producing coal in New Zealand—the wages amount to 9s. a ton before the coal reaches the consumer—is a decided obstacle in the way of the development of an export trade. At present the bulk of the exports takes the form of bunker coal supplied to steamers visiting the Dominion. The conditions of production make it unlikely that the genuine export can, for the time at least, stand the competition of the cheaply produced Japanese coals or even those of Newcastle, in New South Wales. The latter even to-day can be landed in New Zealand at a price which ensures it a good and regular market.

Coal-mining has now entirely passed through its initial trials and is on a sound commercial footing. Ever since 1885 the West Coast mines have produced more than either the Southern or the Northern district, and two years later the output equalled that of all other districts combined. This position is, of course, largely due to the fact that the valuable bituminous seams are practically confined to that district. Close and rigid State inspection has produced excellent results in the equipment and control of the mines, and most of them now possess the most modern labour-saving appliances. The Westport-Stockton mine was the first in Australasia to employ electric locomotives for haulage. The premier company

of the Dominion—the Westport Coal Company, Limited—with a capital of £400,000, is equipped to raise almost a million tons a year, or more than half the total output. It has 5,400 acres of coal area, much of which lies 2,000 feet above sea-level. The output of the mine to date is nearly eight million tons. This and the neighbouring companies supply the bulk of the coal used in the Dominion for steam and gas purposes, as well as the better-class house coal.

From the outset in the early seventies coal-mining was put under proper regulation both as to actual working and the safety of the miners, and as a consequence the mines are, almost without exception, well conducted. Two serious accidents have occurred in the course of thirty years, and 27 million tons of coal have been raised at a cost of 150 lives. The State, besides exercising a certain measure of control in its inspection, has not been backward in granting assistance. It is, indeed, very doubtful if the West Coast mines, now the wealthiest in the Dominion, would even yet have been effectively developed had the Government not taken the steps it did to improve the coal ports. The profits from the local (State) railways, the royalties on the coal raised, and the rents of certain town lands were set aside as an endowment for the improvement of the ports of Greymouth and Westport, and since then very rapid progress has been made. Elsewhere most of the mines lie close to good harbours, or are in railway communication with the seaboard or their immediate markets. At the present moment there is a visible supply of 1,200 million tons of good coal (including 200 millions of lignite) to which the Dominion has effective access either by sea or by rail.

The beneficence of the State towards mining had scarcely prepared the coal companies which had received so much assistance for the new phase of State activity which made its appearance ten years ago. In 1899 the dislocation of the New South Wales industry and the great demand for New Zealand coal for oversea markets caused a severe local shortage. Enhanced prices locally

for a product that was being exported in great volume furnished a cogent argument for the advocates of State Socialism, and by the end of the century Mr. Seddon had openly mooted the establishment of State coal-mines. The Government railways were the largest users of New Zealand coal, and he considered that if the State undertook the raising of its own coal the market would be so relieved that the public would get theirs at a fair price. Two areas on the West Coast, both on Crown lands, were prospected and decided upon as suitable for development. They lie contiguous to Greymouth and Westport respectively. The coal is of excellent quality.

Equipped with the best modern plant, and connected with the ports by new railways, the State mines, immediately upon their opening in 1904, took a prominent position, second only to the Westport in point of output. Within two years the annual output of the two mines was 200,000 tons, a quantity amply sufficient to relieve the market in the manner desired. As soon as the output was assured and the supply for the railways made secure depôts were opened in some of the large towns to retail the coal to private consumers, so that the State is now filling to completion the function of a private colliery and coal merchant. The employees are organised in an industrial union, working under an agreement with the manager of the State mines as to hours of work and rates of pay. At the smaller mine at Seddonville a briquette plant has been installed to make up into marketable form the large quantities of soft coal. This has a capacity of 200 tons in a day of eight hours, and the mines themselves can turn out from 8,000 to 2,000 tons per week.

In point of fact, and in spite of the unquestioned advantages which the State must always enjoy in engaging in certain industries, the New Zealand Government conducts its coal-mines on lines which are generally regarded as fair and equitable to competing companies. Its competition is undoubtedly as severe as that of a strong private company, and it is the best possible

indication of the healthy state of the market that not only have the existing companies made no strong protest against State intrusion, but new private companies have since succeeded in obtaining ample capital to exploit other valuable seams in the same area. In the peculiar circumstances surrounding the coal industry in New Zealand a certain considerable measure of State assistance was absolutely necessary, and the natural sequence of the assistance so genuinely and liberally afforded by a Government which was itself one of the largest consumers of coal, was the development of its own measures. The step was a reasonable one. If the State required any excuse for its action, it was that the existing companies had been unable to supply the public demand except at exorbitant rates.

In the period of fifteen years the collieries of New Zealand have trebled their output and more than doubled the number of their employees. The machinery and plant, too, which in 1890 was assessed at £155,000, is now worth three times as much. The average weekly earnings of the miners in the different districts are :—¹

					£	s.	d.
Northern ...	...	...	...	...	3	3	5
Western ...	...	...	...	...	3	9	6
Southern ...	...	...	...	...	2	1	0
Average ...	...	...	...	...	2	18	0

With the increase of machinery, and, to some extent, the improved skill of the miners, the output per man has increased gradually as under :—

			No of Men Employed.	Average Output. Tons.
1878	...	...	513	316
1888	...	...	1,689	363
1898	...	...	2,003	452·83
1905	...	...	3,269	485

The following skeleton table shows the output of the

¹ Calculation by Inspector E. R. Green in 1906.

colony at different periods, with the imports and exports :—

		Coal Raised. Tons.	Imports. Tons.	Exports. Tons.
1878	...	162,218	174,148	3,921
1883	...	421,764	123,540	7,172
1888	...	613,895	101,341	68,087
1893	...	691,548	117,444	80,000
1898	...	907,033	115,427	65,189
1903	...	1,420,229	163,923	152,332
1908	...		287,808	100,502

At present the demand is excellent. The best seams¹ have been located and tapped by railroads, the lines of communication have been immeasurably improved by the harbour works at Greymouth and Westport, and finally labour is plentiful. There is an inexhaustible supply of first-class steam-coal—1,000 million tons actually in sight—and the whole Pacific seaboard, including the Far East and the western coast of America, bids for the supply if it can only be produced at a sufficiently low cost.

One of the most remarkable of the undeveloped mineral resources is the vast masses of iron which lie practically on the surface of the ground. Within a mile of the ocean at Parapara, Nelson, where wharfage for large vessels could be provided, is a deposit of hæmatite roughly estimated to contain 53 million tons of iron. Dr. Bell, the Director of the Geological Survey, remarks :—

“The Parapara iron deposit, which is composed of hydrous hæmatites, is a most remarkable one, and bears a striking resemblance, both in its large proportions and its mode of origin, to the great ‘soft-ore’ deposits of the Lake Superior region in America. It is rare, how-

¹ The following table gives an analysis of coal from some of the leading seams :—

		Fixed Carbons. Per Cent.	Hydrocarbons. Per Cent.	Water. Per Cent.	Ash. Per Cent.
Kaitangata, Otago	...	44·60	28·93	20·06	6·41
Blackball, Western	...	49·15	46·75	3·2	0·9
Coalbrookdale	...	74·83	20·50	1·16	3·51
Paparoa	...	80·05	15·10	0·65	4·20

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ever, in that part of the world to find deposits of such size actually occurring on the surface."

Assays have proved the deposits to contain from 45 to 60 per cent. of iron. Within four miles is a large supply of bituminous coal and close at hand a belt of limestone. On the West Coast of the North Island, too, in the province of Taranaki, are immense supplies of iron-sand, from which samples of steel of excellent quality have been manufactured. In other parts of the country are found every variety of iron ore, the presence of which, in accessible positions, makes it practically certain that New Zealand must one day possess a large smelting industry. Copper, petroleum, antimony, and chrome ore are the most important of a host of other minerals which are present in quantity, but as yet little worked.

A final and unique article of commercial value which may be ranked amongst the minerals is the fossilised gum of the *kauri* pine (*Dammara Australis*). This tree, the only one of all the pines of New Zealand that bears a cone, is restricted in its incidence to three degrees of latitude and three of longitude, almost entirely in the Auckland peninsula. There are no traces of it outside an area of about 4,000 square miles, and it is not found in any other country.

"Sombre stretches of undulating country, sparsely covered with bracken fern, or with the green scrub called *manuka* by the Maori, and dotted everywhere with up-turned heaps of clay—the marks of past diggers: here and there clumps of native forest, their fringes sentinelled by black logs and gaunt, half-burned dead trunks, far-stretching level swamp land, waving with the long sword-leaves of the native flax, or *harakeke* (another of New Zealand's peculiar and valuable products), or with the white flags of the *toi toi* or the whispering ranks of the light green *raupo* sedge, in sheltered nooks the white tents of the nondescript huts and sod and corrugated iron chimneys of the diggers—these are the gum lands of North Auckland." ¹

¹ James Cowan in "New Zealand, or Ao-tea-roa,"



KAURI GUM-DIGGING IN THE NORTH OF AUCKLAND.

The resinous gum of the tree, which hardens in the air and closely resembles amber, has for fifty years past been a staple article of industry in New Zealand, apart altogether from the wood itself, which is one of the most valuable of the native timbers. From its first appearance on the markets of Europe and America *kauri* gum took a leading place as an ingredient in the manufacture of varnish and lac, and there has always been a ready market for all that can be found. The largest and best supply is obtained, not from the living trees, but from the ground upon which in former days dense *kauri* forests grew.

At the present time there are 3,500 persons engaged in procuration of *kauri* gum, or as many as the coal-mines themselves employ. But the men are of an entirely different class. The workers in collieries are almost invariably skilled men of good character : the gum-fields are the refuge for the riff-raff of colonial society.

The procedure in gum-digging is to search the barren ground, locating the buried treasure by means of an iron probe, or "gum spear," and then dig it up with a spade. It is carefully scraped, washed, and graded according to quality, and proceeds forthwith either to the store of the lessee who has given authority to dig or straight to the merchant's warehouse in Auckland. Originally the Maori themselves gathered the gum from the surface by shallow digging, but its increased value and the high wages which it became possible to make attracted hundreds of whites into the occupation, and to-day the gum-diggers as a rule are making from £3 to £4 a week for skilled diggers, down to £2 or less for the less efficient and amateurs. Families who are prepared to live a nomadic life can do well on the fields, since the children themselves can earn a few shillings for a day's work. The same areas frequently yield payable returns on the third or even subsequent working, and settlers taking up for settlement the open fern lands upon which the *kauri* forests of old stood have been known to recoup themselves out of the proceeds of the gum a considerable

portion of the expenses of "breaking in" the land. The two occupations frequently go hand in hand.

The exact origin of the immigration of so-called "Austrians" to the gum-fields of Auckland has never been discovered. There is a story that a random Austrian happened to win a prize in one of the famous lotteries in Melbourne, and that his countrymen, hearing from him in Auckland of his good fortune, flocked to the Antipodes in the same quest. It is much more likely, though, that the wine-growers and agriculturists from Dalmatia, Istria, and the Balkan States were first attracted to New Zealand by the narrative of Dr. Hochstetter and the seamen of the Austrian frigate *Novara*, which visited the coasts on a scientific expedition in 1858. At any rate, the influx dates back to the sixties. Some of the Austrians found the soil to be suitable for wine-growing, and having come to the Dominion in the first case on the speculative chance of making money quickly, they decided to become permanent settlers and took up land for wine-culture and farming. There are several permanent settlements of Austrians in the north of Auckland, besides a nomadic population making up a total of something like 2,500 souls.

Though the output of *kauri* gum has steadily increased since the inception of the industry in the fifties, its volume to-day is due rather to intense working than to new sources of supply. The deposits are limited in extent, and they are being reproduced in a measure which is infinitesimal. The remnants of *kauri* forest now standing will never provide any considerable new supply. The price of *kauri* gum varies from, say, £7 5s. to £1 per hundredweight, though the rare examples of the best quality realise as much as £10, and the search has long been too keen to allow any great deposits to remain hidden. It is possible that drainage of the swampy lands and the further denudation of the remaining forests may open up new areas, but for the rest the future of the industry is not a promising one. Forty years is the longest life that any optimist has ever predicted for it.

The *kauri* is a tree of extremely slow growth—a healthy forest may vary in age from one to eight hundred years—and the living tree is a poor producer of resin. Gum of inferior grade is occasionally found in the forks of standing trees, and the practice grew up in New Zealand, as it had grown in America and Europe, of “bleeding” the living trees for their resin. For some years the Government leased trees for this purpose, but the practice was discontinued in 1905 in consequence of an adverse report by the Chief Forester. He stated that the extraction of turpentine, tar, and resin from the timber trees of Europe and America had been very injurious to the timber, which by this operation became suitable only for use as packing-cases and similar purposes. Cases are known in which trees have been tapped for a century or more without any apparent injury to their vitality.

The quantity of *kauri* gum exported and its value for periodic years are as follows :—

					Tons.	Value.
1853	...	...	...	...	830	£15,972
1858	...	...	...	...	1,811	20,037
1863	...	...	...	...	1,400	27,026
1868	...	...	...	...	2,690	72,493
1873	...	...	...	...	2,834	85,816
1878	...	...	...	...	3,445	132,975
1883	...	...	...	...	6,518	336,606
1888	...	...	...	...	8,482	380,933
1893	...	...	...	...	8,317	510,775
1898	...	...	...	...	9,905	586,767
1903	...	...	...	...	9,357	631,102
1908	...	...	...	...	5,530	372,798

CHAPTER IX

REFRIGERATION AND PRODUCTION

A crisis in production—The radius for foodstuffs—At the mercy of the home market—The worthless carcase—Agriculture at a halt—Production suspended—Avoiding the consequences—The magic of refrigeration—Production revolutionised—Extraordinary expansion.

To every country newly populated by a civilised people there comes a time in its development at which primary industries are critically threatened. The stage when production overtakes the local demand may be passed without a serious upheaval if there happens to be a ready market for the surplus at such a distance as to make it remunerative even with the added cost of freight.

Thus the United States and Canada, when they were more than able to supply the wants of their own populations, found in Europe a suitable market for their surplus without any danger of the freight charges being excessive, or of the produce perishing in transit. This enabled them to continue without check the development of their natural resources, and to maintain a steadily increasing rural population in profitable occupation of the land. The British colonies in Australasia were on an entirely different footing. At a comparatively early date they had under cultivation the small area of land necessary to meet the local demand for wheat, dairy produce, and meat. At that time the Eastern countries were not consumers in the smallest degree of European foodstuffs. America, five thousand miles distant, was only an occasional bidder for very small supplies. Practically the only country capable of absorbing the

surplus production of Australasian pastures and farms was England, and England was far beyond the radius to which perishable foodstuffs could be carried in good condition. Even the wheat crop was reduced to a narrow margin of profit in any but good seasons.

Under these conditions every acre of land that was brought into cultivation beyond an increase *pari passu* with the slow growth of population tended to lower prices and reduce the profits to the grower. Thus placed by the accident of their geographical position, Australasian agriculturists were thrown on the mercy of a local market which was all too small for them. Agriculture was peremptorily checked. Wool and a little grain were the only products for which there was a permanent market beyond the seas, and all the other avenues of production were perforce abandoned.

At this stage the whole marketable product of a sheep was a few fleeces of wool, one pelt, and a boiled-down carcase. Except in the close environs of a town, cattle were useless but for the skin and the horns. Possibly some preserved beef brought in a little income, but more often the carcase was returned to the land from the animal fertiliser works. These conditions struck New Zealand just as severely as they did Australia. There was a regular but restricted market for butter and cheese landed in Australia in good condition, but this was an inconsiderable offset to the immense geographical disadvantage of distance from the only large consuming community. The climate of New Zealand made it possible for her to produce immense quantities of perishable foodstuffs which Australia could not produce, but in the absence of any artificial means of preservation it could not be sent abroad. As a natural consequence New Zealand agriculture, too, was inexorably halted. Year by year hundreds of thousands of acres were taken up, but the great bulk of it was destined for the depasturing of sheep with the sole object of producing wool. In Australia wheat could be grown with much more prospect of an oversea market than in New Zealand. For

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the latter the oversea wheat market depended largely upon bad seasons in Australia.

Within a quarter of a century of the establishment of the colony, New Zealand was crippled in more than one branch of agriculture. This meant a loss to husbandry far in excess of the actual export that might have been possible under different circumstances. It destroyed to some extent the rotation of crops which is so necessary to the welfare of the soil. It restricted the rural population, and led to a herding of the people in the environs of the towns irrespective of the immigration that was then in progress. Finally it entailed, or encouraged, the holding of land in large areas, with diminished power of rating for development, and with a constant deterioration by reason of noxious pests.

For fully twenty years, at the most active developmental stage of New Zealand's history, production along certain lines was absolutely suspended, and with so little prospect of improvement that only men with capital could afford to embark upon the ownership of land. In each of the following industries there was a hopeless glut :—

- | | |
|------------|-------------|
| 1. Beef. | 4. Cheese. |
| 2. Mutton. | 5. Rabbits. |
| 3. Butter. | |

The impossibility of turning rabbits to account allowed them such respite that they steadily encroached on the more legitimate industry of wool-growing, and levied such a toll on the pastures that millions of acres of land had to be abandoned to them.

While agriculture was in this state thousands of people were being brought into the country, and it became imperatively necessary that work should be found for them by the establishment of new industries to supply the local market with manufactures that were then being imported. It is perilous to reflect how the colony would have fared under this system of lop-sided grafting. The faintest idea of the straits to which it would eventually have been reduced may be drawn from the severity of the depression which did actually follow the prosecution



FERN AND SCRUB IN THE WAIKATO.

Typical land for small settlers.

of this policy, and which lasted over a period of fifteen years. But by that time, fortunately, we were on the eve of those inventions which revolutionised the whole of the producing industries of Australasia, if not of the world. As the glorious seventies flickered out, and the dark days of the eighties dawned, there was not a ray of sunshine on New Zealand's horizon. The land boom had burst, the price of wool had steadily fallen, the country was overrun by an army of imported artisans wanting employment. No man could look the future in the face. Town and country alike were faced with ruin.

But the storm had scarcely burst with its full fury when a ray of light appeared for the man on the land. To him the experiments which had been undertaken by some enterprising men in Australia meant hope. That buoyed him up during the time that was still necessary to prove the success of the new system of refrigeration, and when it was fully demonstrated men could see that the future of New Zealand again lay along the primeval lines of agriculture. The whole prospect altered. Refrigeration had brought the markets of the world to the gates of New Zealand and Australia. Henceforth it was practically certain that anything New Zealand could produce could be transported in wholesome condition to the consumer as far as the poles distant. Those who were on the land were encouraged to remain there. A new demand arose—the genuine demand of the small farmer to possess a holding; and from that moment, through all the political vicissitudes of the last quarter of a century, the tendency has been steadily and steadfastly in the direction of closer settlement and closer cultivation.

A single table will show at a glance what refrigeration has done for New Zealand in restoring and developing the previous staple productions :—

VALUE OF EXPORTS.

		Wool.	Meat.	Butter.	Cheese.
		£	£	£	£
1860	...	444,392	—	6,623	3,535
1880	...	3,169,300	—	8,350	1,983
1907	...	7,657,278	3,520,877	1,615,345	662,355

Before refrigeration made its appearance there was a slump in almost all foodstuffs. Beef had fallen from 6½d. a pound in 1850 to 4½d. twenty years later ; bread from 9d. to 5½d. ; flour from 17s. to 12s. ; mutton from 6d. to 3d. ; pork from 6d. to 4d. ; potatoes from 140s. to 80s. ; butter from 1s. 8d. to 8d., and cheese from 1s. 6d. to 8d. The sudden influx of people during the gold-mining days had created a sort of boom. The high level of prices for a few years encouraged farmers to increase their acreage and production in a manner which told heavily against them a few years later.

CHAPTER X

THE FROZEN MEAT INDUSTRY

Position of sheep-farmers in 1880—No market for mutton—England the goal—Refrigeration—Experiments in Australia—Mr. Thomas Brydone's venture—Successful shipment from Dunedin to London—Enthusiasm in the colony—Sailing ships ousted by steam—Mistakes and malpractice—Popular prejudices—Lord Onslow's demonstration—Learning the business—Meat-marking legislation—Compulsory inspection for disease—Precautions against injury—Flocks endangered by over-exportation—Culling and replenishing—An industry revolutionised—By-products—The beef question—Competition of America—Government assistance—Regulation and inspection.

DURING the seventies—the decade of New Zealand's prosperity on borrowed money—the area of land in occupation increased nominally fourfold. But most of the new country brought into occupation was in the form of additions to the existing large pastoral "runs." It simply gave more room for the flocks to run. The size of the flocks was already causing some anxiety, but so long as the price of wool kept up there was no immediate danger. The output of wool increased by 150 per cent. during the period 1870–80, and in the latter year the flocks totalled thirteen millions.

But in spite of the appearance of prosperity, the sheep-farmers were by no means happy. Many had bitten off more than they could chew. Their holdings were too large, and they anticipated with fear and trembling the day when low prices or a tightening money market should bring them face to face with their liabilities. Scab still raged among the sheep, involving heavy losses, increased expense, and taxation. But what troubled the

settlers most was the absence of a market in which they could dispose of the full product of the sheep stations. Up to this point sheep were animals of practically a single utility. To the great majority of the farmers the annual fleece was the only source of revenue. The rest of the animal was transformed into manure when it was no longer able to furnish decent wool or lambs. The mutton required for consumption by a population of half a million was a mere fleabite where there were flocks of thirteen millions to draw upon. First-class meat brought next to nothing. There were occasional shipments of live-stock to Australia in time of drought, and to South America for breeding purposes ; but this revenue was only a detail for a few breeders. In short, the wool was the only part of the sheep for which there was an assured market. The animal itself was a mere by-product.

Under these conditions old sheep were kept until they were no longer capable of paying their way, and then disposed of with the least expense to their owners. Thousands were driven off to the boiling-down works—at the nominal price of sixpence a head—to save the farmers the trouble of killing and burying them. Hundreds of tons of first-class mutton were each year ruthlessly put through the digester and converted into manures. Skins and tallow had a market value, but the owner was lucky indeed who netted 7s. or 8s. from 70 or 80-lb. sheep. While the price of wool was good even such sacrifices as these could be borne ; but a fluctuation of a penny a pound in London meant a difference of a quarter of a million sterling in New Zealand, and when prices kept consistently low for a few years the farmers were put to it to devise some means of turning their rapidly increasing flocks to better account.

The object to be aimed at was obvious enough. Unless a market could be found for mutton, the sheep industry of New Zealand could not possibly be developed to a profit. It was economically impossible to go on

growing wool, with the sheep itself as a by-product. The nearest meat-eating nation was the Australians—two or three million white men—but Australia was itself one of the greatest sheep countries in the world. The teeming millions of China, Japan, and Siam did not appreciate the virtues of mutton as a food. The only promising outlet was the English market; but it was three months distant, and the transport of live-stock was out of the question. The sea-borne commerce of New Zealand consisted chiefly of wool, and it was carried almost entirely as yet in sailing ships. The quickest passage ever made from port to port was sixty-nine days. Live-stock making such a journey would lose all the flavour and condition acquired on their natural pastures, and consume all their profits in forage. The only hope in bringing together the producer in New Zealand and the consumer in England lay in one or the other of the processes of refrigeration which had been demonstrated with some degree of success between the United States and England. In that case, though, the voyage was not more than one-fourth as long as that from New Zealand to England, and it was accomplished by steamships.

Pastoralists in Australia began experimenting. In 1879 they made two partially successful shipments of frozen meat to London, and freezing works were immediately established at Melbourne and Orange (New South Wales). Unfortunately, the industry received a set-back in subsequent shipments, and the works closed down. Having taken the lead and demonstrated the possibility of preserving the *status quo* of meat by cold storage for a period of several weeks, Australia abandoned the work entirely until the success of New Zealand encouraged a revival.

It was a series of bad seasons for wool that impelled the New Zealand Government to action. Settlement had been pushed ahead so vigorously that it was imperative that markets should be found for the produce. To this end a bonus of £500 was offered for the first 100 tons of fresh meat landed in Europe in condition fit for

human consumption. The offer was announced in May, 1881, and there the action of the Government stopped. There was no subsidising of the proposed industry; there was no appropriation for experimental purposes. Yet before the year closed the bonus had been claimed and practically earned.

The New Zealand and Australian Land Company was one of the largest landed proprietors in the country, and, in common with other owners, it was every year ridding itself of the surplus of its flocks at sacrificial prices. Much colonial capital had already been lost in the endeavour to transport fresh meat to England, but the introduction of the dry-air system seemed to promise better results than had so far been obtained. It was a pure speculation, but the stakes were worth playing for, and the manager of the Company, Mr. Thomas Brydone, determined to make another attempt. An agreement was entered into with the Shaw, Savill and Albion Company to fit up one of their sailing ships, the *Dunedin*, to carry a meat cargo to London at a freight of 2½d. per pound. The experience of Melbourne and Orange was drawn upon, but the fitting up of the ship, which was carried out at Port Chalmers, was a good deal of a hazard. A killing-place was hastily erected at Totara, near Oamaru, seventy miles from the port of shipment. Sheep were slaughtered at the rate of 250 a day, railed immediately to the port—it was the height of the New Zealand summer—and stowed forthwith in the freezing chambers of the *Dunedin*. When the work was half finished the machinery broke down, and every carcase had to be taken out of the ship and sold for what they would fetch in preference to decomposition. Finally the *Dunedin* left Port Chalmers on February 15, 1882, with the frozen carcasses of 4,311 sheep and 598 lambs. The average weight of the former was 80 lb. and of the latter 40½ lb.

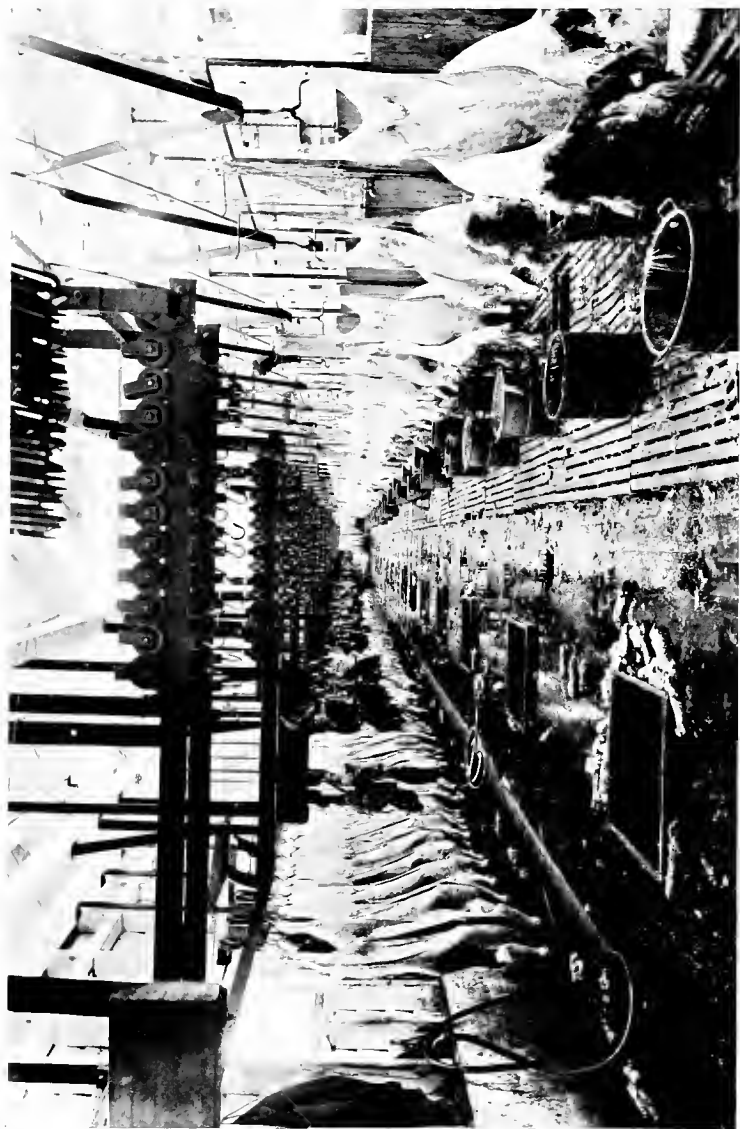
Working in the dark as they were, the captain and engineers had to exercise the greatest care and vigilance throughout the voyage to keep the machinery in working order and the cargo at the right temperature. The

result was a triumph. The meat was landed in perfect condition and sold for 6½d. per lb.—a price which has not since been reached. But the price was a subsidiary circumstance. The “prodigious fact” was there, to quote the *Times*, that fresh meat from the Antipodes had been landed in London in perfectly sound and wholesome condition. And prodigious it was for the colonial meat industry. For New Zealand it utterly revolutionised both agriculture and grazing.

The methods of refrigeration generally adopted were all more or less varieties of the original Bell-Coleman and Haslam systems. Certain gases—usually ammonia or anhydrous carbonic acid gas—are compressed by steam power or electricity to a fraction of their volume. On expanding again the temperature is reduced considerably, and this process is continued until the desired result is reached. When liberated the gas passes through coils of pipes which are immersed in a solution of chloride of calcium, which will not freeze at the temperature required for the refrigeration of meat. On emerging from the coils the gas again goes through the compressors, and the temperature can be reduced considerably below zero. Thus is obtained the supply of intensely cold brine which is actually responsible for the work of freezing the meat. It is applied to the chambers either in pipes or by coming in contact with a current of air passing into the chambers.

When the fame of the *Dunedin's* cargo returned to the colony the lot of the sheep on the New Zealand mountainsides became a sad one. Hitherto they had lived to a good old age, many dying peacefully in their pastures. In fact, the flocks were tainted with the blemish of senility. Now life bore a new terror for sheep that had cheerfully yielded up their fleeces year in and year out. Immediately large drafts were driven off to the works that sprang up like mushrooms near all the great seaports. In that first year of grace 1882, 30,000 New Zealand sheep were offered up a sacrifice to the new foe. Next year it was nearly 200,000, and in the ninth year of freezing two

million sheep were slaughtered for export. Works were erected at Dunedin, Oamaru, Invercargill, Timaru, Christchurch, Picton, Wellington, Gisborne, Whanganui, Waitara, and Auckland. Shipping companies, freezing companies, farmers, and the general public threw themselves with enthusiasm into the quest of new and cheaper methods of killing sheep and transporting the meat, into the study of breeds and crosses, and the question of supply and demand. But it was almost entirely a question of supply. The British public did not at once become enamoured of the new meat, but from the first there were sufficient consumers to absorb all that arrived. The New Zealand Shipping Company, the other great line engaged in the New Zealand trade, fitted up several of its ships with refrigerators—the *Mataura* being the first—and led the movement from the North Island. There was now the most cogent reason why steamships should supplant “wind-jammers” in the service, and the Government called for tenders for a monthly service of steamers to make the voyage to London in fifty days. The companies at once responded by building a number of fine steamers—fitted with insulated chambers and refrigerators, and capable of carrying upwards of 12,000 carcasses each voyage. For some years the sailing ships remained in the trade, but the competition of steam in the carriage of meat was too severe, and even the wool-growers began to show a preference for steam freight. Early in the nineties there were four large shipping companies engaged in the trade, and the sailing ship passed quietly and swiftly out of sight. At the present time the four companies, controlling a multitude of steamers of from 8,000 tons upwards, are running regular services between London and New Zealand, and thirteen seaports in the colony are regularly shipping frozen produce direct into the holds of these liners, many of which can take upwards of 100,000 carcasses each voyage. Shipping companies engaged in the coastal trade have also installed refrigerators, so that practically every river port in New Zealand is in better touch with the ocean highways than



SLAUGHTER-HOUSE AT THE WELLINGTON MEAT EXPORT COMPANY'S FREEZING WORKS AT NGAHAURANGA.

the warehouses of London which receive their perishable produce from ordinary "flats."

Refrigeration was the salvation of New Zealand. At a time when the colony was in the lowest state of depression in its history, when the labour market was glutted with unemployed, and the agricultural classes were disheartened for lack of markets, it gave birth to two industries which rejuvenated the country population and absorbed some of the surplus of the cities; which gave an impetus to the genuine settlement of the land by small men able to work it, and which brought into the country during the worst period of its depression nine millions sterling of absolutely new revenue. Within eight years of its inception the trade was worth more than a million pounds a year; and in 1907, only a quarter of a century from the first trial shipment, New Zealand exported frozen meat to the value of nearly four million pounds.

But the industry was not firmly established without going through many of those vicissitudes which arise from ignorance in the earlier stages and from malpractice later on. The British public was harder to convince than the *Times*. A host of strange notions and objections were brought forward: absurd many of them appear to us to-day. The Duke of St. Albans, for instance, protested against meat being brought from the Antipodes to compete with the produce of English farms, but he comforted the farmers with the assurance that the experiment was an unnatural one, and that not only was the trade foredoomed to failure by its own inherent difficulties, but the meat, from its inferiority, would be utterly unsaleable. The poorer classes of England hitherto had not been in the habit of eating meat at all, except as a rare luxury, and they were easily persuaded that the process of freezing extracted all the nourishment from the mutton and left it a mere mass of unsightly fibre: dull and battered, not too sweet to the nostrils, and, if wholesome, certainly not appetising. This was the most stubborn fallacy of all. In many quarters it remains unshaken to-day. Still, the original idea that frozen meat was impregnated with

ptomaines has been lived down. The new process has brought cheap and wholesome meat within the reach of the poorer classes, and there is now in England a market for all that New Zealand will be able to produce for some years to come.

In 1891, when the prejudices were still fairly strong, Lord Onslow (then Governor of New Zealand) made an interesting experiment to ascertain whether the difference in price between English and New Zealand mutton on the English market was due to prejudice or to a corresponding difference in quality. The colonial product now ranked next to Hampshire and Southdown, but it realised only about 5½d. per lb. Lord Onslow selected from the different classes of London society six gentlemen of his acquaintance who were known to have first-class cooks, and who had no interest, direct or indirect, in English sheep-breeding. Six New Zealand sheep were slaughtered, frozen, and sent to an agent in London, who had orders to deliver them, carefully thawed and ready for consumption. In advising the gentlemen referred to of the shipment, Lord Onslow made it perfectly clear that the sheep were not to be considered as presents, but were sent purely for his own information, to ascertain whether the freezing process caused deterioration in a joint of mutton which he had found in New Zealand to be equal in quality and flavour to the best he had been able to produce from his own pedigree Southdowns in England.

The opinions were a chorus of eulogy. The Baron de Worms, Under-Secretary for the Colonies, said: "The freezing did not hurt it in the least: in fact, the greatest epicure would fail to discern that it was not Home-grown."

Lord Rosebery: "The mutton was excellent, and not to be distinguished from English mutton."

General Sir Henry de Bathe, of the Beefsteak Club: "I, who am a dweller in the Southdowns, can safely aver that your individual sheep was better than what I can buy in Chichester, where it always wants age and colour. It was as tender as a chicken."

M. Waddington, the French Ambassador : "All present pronounced it quite equal to the best English mutton. The freezing of the meat had produced no appreciable difference."

Sir Morell Mackenzie : "It had a great deal of flavour and was very tender. In fact, I only recollect tasting mutton as good on one or two occasions."

The prejudices against frozen meat might have been sooner surmounted if the industry had been better organised, but to a great extent every shipment was an experiment. There was no previous experience to reduce the freezing and transport of meat to a science. The directors of the freezing companies were principally farmers, and they had to profit by their own mistakes. Sometimes, indeed, it seemed as if the freezing, insurance, and freight charges, amounting in all to 3d. per lb. on the meat, would not leave the growers any profit. There were cases in which good cross-bred wethers returned their owners only 2s. 6d. or 5s. a head clear. Occasionally the farmers got no more than the 6d. per head of the bad old days of boiling down. But men who had been able to tide over almost certain ruin by the help of the new industry were not likely to be discouraged, and eventually the different parties to the industry came to a thorough understanding, by which the charges were reduced fully 30 per cent. The freezing companies had at first been unwilling to bear all the risk by purchasing the sheep outright, and the farmers were compelled to shoulder a share of the responsibility. This, too, has been remedied by the prosperity of the industry. Some of the more recently established companies are on the co-operative principle, and the farmers reap double profits as growers and agents.

Innumerable lessons, again, had to be learned in the breeding, treatment, and finishing-off of sheep for slaughtering, until to-day the whole subject has been reduced to a fine art. The idiosyncrasies of the consumers are thoroughly understood, and the growers have learned how to utilise to their utmost the different classes

of pasture, and to turn out a carcase of the requisite size, quality, and fatness, with the "bloom" which makes it attractive even in the markets of the Antipodes. Within ten years New Zealand mutton and lamb were firmly established in the London market as the premier overseas product, and second only in quality to English and Welsh. The fine climate, healthy pastures, and abundance of moisture gave New Zealand growers an immense advantage over their competitors in Australia and the Argentine Republic, and it was only malpractice that had now to be feared in competition.

No sooner was the excellence of the New Zealand product established than unscrupulous dealers commenced to palm it off on the consumers as English and Scotch mutton and lamb. Though this did not, of course, reduce the prices obtained for the New Zealand article, it prevented the colony from reaping the full advantage by establishing its own brand. At the instigation of the New Zealand Parliament an Imperial Act was passed to make it compulsory to plainly mark imported meat as such.¹ With this new measure of protection New Zealand mutton and lamb forged still farther ahead of their rivals. The Australian States were only commencing to revive their efforts, and neither they nor the Argentine could be classed as serious competitors. Mutton and lamb from the province of Canterbury came to be regarded by consumers of frozen meat as delicacies *par excellence*, and it was now landed, with rare exceptions, in first-class condition. Success brought another penalty. Actuated by the same motives as before, the unscrupulous dealers now commenced to retail inferior brands of colonial meat under the name of New Zealand. Cheap labour, low freights, and unlimited pastures favoured the Argentine growers, and they were able to produce a much cheaper article than New Zealand could. But the quality was as yet entirely inferior,

¹ The Foreign and Colonial Meat Act, 1890, makes it mandatory on dealers to plainly indicate the origin of all meat sold, and constitutes the selling of foreign or colonial meat as British or Irish a penal offence.

and it was essential that New Zealand should be secured against the inroads of fraudulent dealers. The Hon. W. P. Reeves, Agent-General for New Zealand in London, was convinced that only a determined stand could save the industry, and strongly advised the marking of each individual carcase of meat before it left the slaughterhouse with an indelible brand. Now for the first time the Government ventured to assert its authority in relation to this particular industry, and proposed certain regulations with a view to safeguarding its future against malpractice. The companies protested strongly against what was called State interference. The marking of the carcasses with indelible brands, they predicted, would make them so unsightly that no butcher would sell New Zealand meat. As regards official grading, anything more than inspection for disease they considered dangerous. If it was carried farther, the mutton and lamb of the province of Canterbury, which amounted to more than half the exports, would be reduced to the standard reached by other districts, or else the latter would have to be graded as second-class. The argument was made with some effect that as the industry had done so well without Government help any legislative action now could only be regarded as interference.

For more than three years these proposals were before the country. In that time all the hopes that had been cherished of finding a new and enormous market for colonial meat on the Continent of Europe had been dashed to the ground by the discovery at Hamburg of tuberculosis in a consignment of meat said to have come from one of the Australian States. The argument for inspection of meat for export was now complete. The Government held its ground, and in 1900 passed without great difficulty the Slaughtering and Inspection Act. This made it a penal offence to slaughter diseased animals for human consumption either at home or abroad. All slaughtering was placed under the immediate inspection of Government veterinarians, and carcasses found diseased have to be disposed of in the most

thorough manner, by burning, burial, or boiling down. Not a single carcase of meat can be exported without the certificate of the State inspector that it is in good condition, free from disease, and properly frozen, chilled, or otherwise preserved. The inspection even extends to the ship which carries the meat, and if there is the slightest defect in the insulation or the refrigerating machinery the inspector can refuse to allow the meat to be shipped.

Under the safeguards provided by this Act New Zealand farmers are reaping the full benefit of quality. Though competition has somewhat reduced the prices which are obtained for the best meat, many abuses of the trade have been eliminated, and they are able to rely with confidence for their supremacy on their fine pastures and equable climate, their modern and well-equipped works, and the exact science which has accrued from a quarter of a century of experiment and costly mistakes. The expansion of the frozen meat industry is well illustrated in the following table, showing the number of works and hands employed at different periods:—

MEAT FREEZING AND PRESERVING WORKS.

				No. of Works.	Hands Employed.
1885	...	...	...	44	838
1890	...	...	...	43	1,568
1901	...	...	...	48	2,282
1906	...	...	...	56	3,260

Statistics do not, however, give an idea of the fine modern equipment of the works, the concreted and tiled floors, the scrupulous cleanness, the conservation of by-products, the skill of the butchers, the thoroughness of the inspection, and the tender care that is taken of the sheep right from the pastures to the shambles, and thence to the hold of the ship. From the time that the freezing companies obtain possession of the sheep until they reach the London docks there is no possible chance of

deterioration. It is the rarest occurrence for some flaw in the machinery or negligence of an employee to escape the jealous vigilance of the inspectors, and any damage so caused is at once detected when the meat is again examined at London. One of the defects which still remain is in the lightering of the carcasses by some of the smaller companies in slow and wretchedly-equipped flats on the Thames. Though the frozen carcasses are as hard as wood, they are susceptible to damage by bruising, and after being out of the chambers for some time may suffer considerably in the passage up-river in sweating barges—an episode of their career which is largely responsible for the dull, battered, and unsightly appearance of much colonial meat in London shops.

The new principles of breeding which were introduced to meet the new demands of the sheep industry are dealt with in the chapter on wool-growing. Until freezing commenced the difficulty farmers found was rather to keep their flocks down to certain limits while producing all the wool they could. Now almost the reserve trouble menaced them. So many sheep were slaughtered in the first few years after the momentous experiment of 1882 that it seemed very likely that the flocks would be seriously reduced. The market was such a remarkably lucrative one that farmers were feverish in their haste to get as many sheep into the holds of the ocean-going steamers as they possibly could. Few of them thought of to-morrow when an honest penny was so easily to be turned to-day. Thinking men became anxious. The area of land occupied in 1882 was five and a half million acres, and there were thirteen million sheep. In the United Kingdom the proportion of the flocks slaughtered every year is more than one in three. In New Zealand at that time it was less than one in seven. But the export has developed with such strides that to-day, with flocks numbering about twenty millions, New Zealand is sending away more than five million carcasses a year, and slaughtering perhaps a third as many for home consumption. So that the reduction of the flocks each year

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by slaughter is very nearly one-third.¹ Nowadays, of course, the flocks are weeded out more carefully and the sheep are comparatively younger than a quarter of a century ago, when the owners avoided boiling down so long as the fleece was worth clipping. The heavy drain of the freezing industry has kept the flocks in check. On two occasions—in 1894 and 1902-3—over-exportation has reduced the permanent numbers of the flock. In the two years 1902-4 the excessive exportation, particularly of ewe lambs, caused a shortage of two millions, and the flocks have just now regained their former dimensions. The figures for the period covered by the freezing industry are as follows:—

1881	...	...	...	...	...	...	12,895,085
1886	...	...	...	...	...	...	16,564,595
1891	...	...	...	...	...	...	18,128,186
1894	...	...	...	...	...	...	20,230,829
1895	...	...	...	...	...	...	19,826,604
1896	...	...	...	...	...	...	19,138,493
1901	...	...	...	...	...	...	20,233,099
1906	...	...	...	...	...	...	20,108,471
1908	...	...	...	...	...	...	22,449,953

Though the area under cultivation has nearly trebled in a quarter of a century, the flocks have only increased by slightly more than 50 per cent. But to-day every sheep is in profit. The yield of wool has increased by 150 per cent., and the farmer has a revenue of 7s. 6d. to £1, and sometimes more, from each sheep on his pastures. Moreover, the land is supporting twice as many horses and three times as many cattle as at the commencement of the period, and half a million of the cattle are kept on first-class land to support a new and lucrative industry which was not in existence when freezing began. It has also to be remembered in considering the prospects of

¹ The sheep returns are made up at a date before the annual lambing and after the height of the exporting season, so that hundreds of thousands of young sheep—the prime lamb of the English market—are never recorded in the flock lists. Representative lambing averages in good seasons may range from 75 to 110 per cent.

New Zealand flock-owners that there are now nearly 11 million breeding ewes—an increase of 25 per cent. in ten years.

The total quantities of mutton and lamb exported in periodic years since the inception of the industry are as follows :—

			Mutton Carcases.	Lamb Carcases.
1884	...	...	247,772 ¹	—
1892	...	...	1,768,055 ¹	—
1902	...	...	2,531,993	2,104,544
1907	...	...	1,989,393	2,844,215

A very important feature of the industry is the utilisation of the by-products of slaughtered animals. In this branch there was the experience of the great meat-packing houses of America to work by, and to-day it is safe to say that not an atom of material is wasted. Most of the freezing works have plant for the conversion of blood and other refuse into manure, in which condition it is returned to the pastures. Sheepskins and pelts are all absorbed either by local leather works or by export. Bones, horns, hoofs, and intestines are all made use of, and the export of tallow is worth more than half a million. Altogether the by-products from the slaughter of sheep and cattle, after providing for all the needs of the home population, contribute a million and three-quarter pounds sterling to the value of the Dominion's exports.

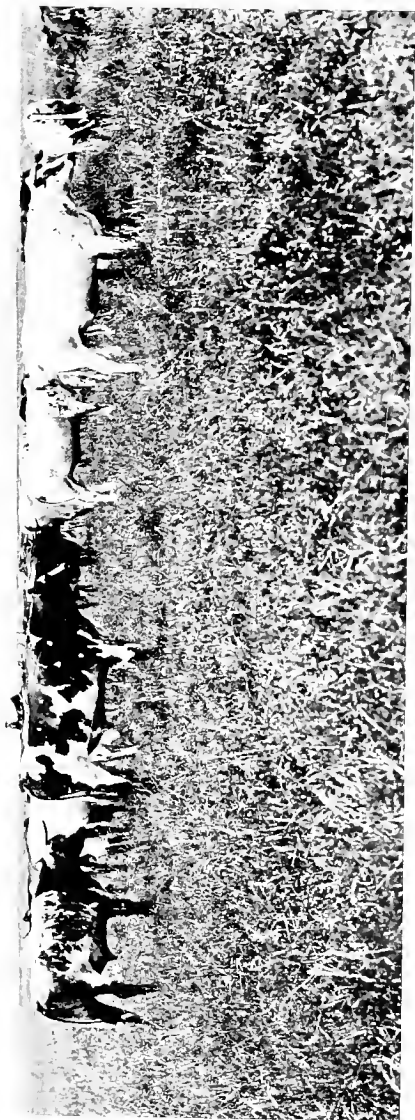
The situation of New Zealand is not at all advantageous for the supply of beef to the English market. Huge supplies have always been available in the United States, which is only a few days distant from England, and at an early stage of refrigeration the possibilities had induced the investment of enormous sums of English capital in developing the unlimited pasturage of the Argentine Republic, a country which lies about half-way between England and New Zealand. Lighter freights, lower wages, and unrestricted pastures enable the American republics to land beef in England much cheaper than

¹ Including lambs.

New Zealand could ever hope to do. The comparative shortness of the voyage, moreover, enables them to adopt the superior process known as "chilling." The market became so uncertain for New Zealand beef that where the conditions of the country did not absolutely demand the keeping of cattle most of the settlers turned their attention to the more attractive and lucrative sheep. In 1888 New Zealand exported 40,000 cwt. of beef to England, or thirteen times the quantity that was derived from the Argentine. But the South American trade, which was only then beginning, rapidly outstripped competition and took a leading place. It is true that New Zealand beef has since recovered on a more stable basis and is now worth about half a million sterling per annum, but it is a mere detail in the exports and is not the centre of any concentrated effort.¹

The beef that is exported, though excellent in quality, is practically a by-product of the other great industry that sprang up under refrigeration. Out of a total of about two million cattle one-third are cows and heifers that have been carefully culled for dairy purposes. Another third may be classed as steers and young cattle which are being kept for beef purposes and are depasturing either on rough or newly settled country or in the rich finishing pastures of the lowlands. New Zealand farmers are thoroughly alive to the necessity for quality in herds, and the State inspection for the eradication of tuberculosis, blackleg, and other disorders is most stringent. The effects of this selection have been most marked during the last few years. The keeping of diseased stock is a penal offence, and farmers are compensated by the State for their destruction. The cattle are raised under the finest conditions of climate, pastures, and breeding, and the beef is killed and packed under conditions not equalled in any other part of the world. It is purely the disadvantageous geographical position of New Zealand that has tempted the farmers of the

¹ The importation of boned beef into England was prohibited in 1908—a severe blow to the New Zealand trade.



FAT CATTLE IN THE WAIKATO.

Dominion to avoid the risk of growing beef and to kill their young stock after carefully selecting the most promising animals for dairy purposes. The beef cattle are therefore the pick of the young stock.

In a consideration of the frozen meat industry of New Zealand it is interesting to reflect on the action of the Colonial Government. There is a very general impression in England that the colonies are simply fields for the production of the crude raw material, that most colonial industries are unduly pampered by the State and could not subsist under the ordinary conditions governing private enterprises in the Old World. In this case the idea is strikingly refuted. It cannot be contended for one moment that the Government of New Zealand has done more for the frozen meat industry than the Government of England would do in similar circumstances. Not a penny of public money was expended in preliminary experimenting, in subsidising the farmers, or in capitalising the freezing companies. The bonus of £500 which was offered (and awarded for the Shaw, Savill and Albion Company's first shipment) would not recoup them a fraction of the cost of the experiment. The stock and station agents and the farmers themselves furnished all the money upon which the industry was established and paid for all the mistakes of the early years. The opening of the market in the first case, the beating down of prejudices against the use of frozen meat, and the usual vicissitudes of a business conducted against powerful rivals were all carried out by the sheep-owners and agents. In Australia, it is true, the Governments concerned did actually provide some capital out of the Treasury for the establishment of works. In New Zealand the industry was built up independent of any such assistance.

What the Government did at a later stage was perfectly legitimate, even from the standpoint of those who do not approve of bounties. Its help was restricted to legislation to guard the industry from abuse, to check unscrupulous traders, and to ensure that the credit of the Dominion as a whole should be conserved in the quality of its exports.

The Government of New Zealand has simply acted as policeman and tutor to the traders and farmers engaged in the business. Its functions of inspection, investigation, and instruction have been most thoroughly prosecuted both in New Zealand and in England, and its worst enemies have long since acquitted the Government system of the crimes which it was expected to perpetrate. It is the best guarantee of good faith as between the grower and the ultimate consumer.

CHAPTER XI

THE WEALTH OF THE COW

Haphazard dairying—The farmers' dairies—Lack of uniformity—Co-operative factory system introduced—A mild revolution—The transformation of the country—New settlement—Scenes at the factory—The creameries and butter factories—At the grading stores—Equality and democracy—Into the ship's hold—Growth of the industry—Cheese-making—Australian competition—A change of markets—Elements of disadvantage—State inspection—An experimental station—The dual-purpose cow—Milking at a loss—The cattle census—Healthy herds—The value of land.

BEFORE the days of refrigeration every farmer made butter on his own premises and according to his own crude ideas. In 1870, when the population was only a quarter of a million, the dairies on New Zealand farms were turning out five million pounds of butter and half as much cheese each year. But it was of wretched quality compared with the standards of to-day : variable, and liable to develop all manner of obnoxious flavours during the short voyage across the Tasman Sea. It was out of the question in those days to carry butter farther than to Australia. As often as not, too, the Australians themselves produced all they required. Cheese, of course, could stand with advantage the journey of three months to England, and it achieved an early reputation on the market there.

In those primeval days the market for the farmer's dairy was as a rule the not very discriminating neighbouring town. The people, unaccustomed to quality, were not very exacting. The prices paid were usually less than 1s. and sometimes as low as 5d. a pound, quite

too low to remunerate any but the easy-going farmer's wife, whose perquisite the dairy generally was. Only the cleverest of them were capable of making butter that would not develop prohibitive flavours on the voyage across to Australia. In cheese, too, he was a lucky merchant indeed who found less than a dozen flavours or qualities in the smallest consignment from New Zealand to Australia. At this time Australia was even more backward, and the New Zealand Government made strenuous efforts to build up a reputation for the New Zealand article which would give it command of the whole Australian market. New Zealand possessed the finest and most succulent natural pastures and a climate which made it unnecessary in many localities to house the stock either in winter or summer. There was even then no reason why the farmers should not produce as good butter and cheese in the Southern Hemisphere as the Danes did in the Northern. Obviously it was system that was required. There could not be uniformity when farmers followed their own individual ideas, and produced a few dozen pounds each week in dairies run on wholly different lines.

The Government wished to encourage the construction of up-to-date dairies, and in 1881, before refrigeration had been vindicated, it drew up a scheme for the establishment of cheese and butter factories on the co-operative system. A bonus of £500 was offered for the first fifty tons of cheese produced in New Zealand on the factory or co-operative system. Under the latter the farmers of a district combine to form a limited liability company with a capital of a few thousand pounds, just sufficient to erect a central factory (and possibly some outlying skimming stations) for the collection of the milk and its manufacture into butter and cheese. The main advantages of the system are:—

1. By combining the farmers are able to obtain the best machinery and employ the most skilful managers; and
2. They can turn out a large quantity of butter and



A SOUTHLAND DAIRY HERD

cheese of good and uniform quality, instead of multitudinous parcels of widely varying quality.

For a few years the new system made slow headway. In the province of Taranaki long Maori wars and a variety of circumstances had prevented the aggregation of large estates, and there was a vast extent of fertile downs either under native fern or covered with light bush. A class of small farmers, including many military settlers, occupied the coastal districts. As a rule they were men of small means, and they readily adopted the new scheme of co-operation. A few factories sprang up. The soil and the climate were alike favourable, and after a test of a few years the industry rapidly expanded. Other districts followed suit. Within ten years there were upwards of a hundred butter and cheese factories in New Zealand. Refrigeration opened up markets in a wonderful way. Whereas Australia had formerly been the sole outlet for New Zealand butter, it was now possible to send it straight to London, and gradually the Australian trade fell away. In 1885 all but $1\frac{1}{2}$ per cent. of the product exported went to Australia. Within seven or eight years the proportion was exactly reversed. Practically the whole of the output went direct to the English market.

To-day New Zealand is studded with factories and creameries from the Bluff to Cape Maria van Dieman. Wherever the ringing metalled roads of the plains converge there is a finely equipped factory drawing its supply from a radius of ten miles or more. Where a village has formed in some quiet, green valley of the foothills the laden spring-carts of the farmers make regular journeys to the unpretentious little building that stands near the church. And far away in the recesses of the bush the cowbells tinkle as the cattle, knee-deep in clover, browse amongst the logs. This is a new era. The calf is no longer killed unfatted. Everywhere in the new country the bush is going down before the relentless axe. The eager, hard-working settlers are glad to tide over the first years of their holding by the arduous work of dairying.

Charred and clean-burnt, the logs lie on the ground where they fell, by the stumps of the parent tree. Post-and-wire fences rise, and almost as suddenly the braird of luscious grass springs out of the ashes of yesterday. In a few months the young cattle are browsing there, carefully watched that they do not eat the early pasture out of the ground, and just as carefully that they keep the resurgent scrub and fern in subjection. If there is a creamery—a collecting depôt for cream—anywhere within reach, the settler will milk a few cows. If only the summer makes passable the dank, overshadowed pathway of mud which shuts him into the bush in the winter, he will drive his light cart each summer morning to the creamery. Even if it is not passable he is not discouraged without having tried the last resort of the bush settler, viz., packing the cream on the backs of bullocks. As a general rule the backblocks settler is not so badly placed that he cannot get his cream with comparative ease during the summer to one of the outposts which each butter factory has scattered over its area of supply.

The methods adopted by the factories are generally the same. The creameries are so placed that the largest possible areas can be tapped without deterioration in carrying the milk to the final butter-making. The suppliers are generally shareholders of the co-operative company, and besides being paid at the current rate for their butter-fat, they participate in the profits of the year's working. Though there may not be a house in sight, the well-worn summer roads lead unfailingly towards the creamery or the factory, where every morning the whole countryside makes rendezvous to deliver the day's milk. As soon as a sample has been taken from the weighed milk, the cart moves off, the cock is opened, and the pure white flood rushes forth into the vat, thence out over the heaters to the separator. In New Zealand the De Laval separators (Swedish make) are in almost universal use. "Observera," says the Swedish inscription "5,600 hoart pr minut," and as each hundred revolutions is counted off the tiny bell tallies it

and the milk and cream, separated by the centrifugal action, pass off in divergent streams, the former to the reservoir where each farmer fills his cans with his own proportion of "skim" for pig and calf food, and the latter to the ripening vat, to be churned on the morrow. After putting through milk at the rate of four hundred gallons per hour, the bowl contains a solid coating of impurities sometimes half an inch in thickness. If this is merely a skimming-station, or outpost, the wagon starts off in the cool of the evening to take the cream to the railhead or to the central factory.

A typical example of an up-to-date butter factory is one which draws its cream, through eighteen skimming stations, from 320 suppliers, who are scattered over a catchment area with a radius of thirty miles. This company in a single season draws nearly three million gallons of milk. By rail and wagon the outposts send in the cream separated in the morning. It is at once passed over coolers into the ripening vat, where an automatic attemperator keeps the temperature from rising. In the morning it is ripe, and the churning commences at once, the steam-driven vats each holding 160 gallons of cream. In half an hour the buttermilk separates from the butter and is run off. The churn is opened, and there, beautiful to the gaze, is 800 lb. of pure, granular butter, fresh and yellow like ripe maize. In the whole process of working on revolving tables it is never touched by the hands. It spends the night in the chilling-room, is packed in the morning in the $\frac{1}{2}$ -cwt. boxes in which it reaches London, and in the dead vast of the night it commences its journey down to the cool stores at the port of shipment. It is a rare occurrence for anything to go wrong even in a railroad journey of one hundred miles to the port.

At this point the Government steps in, under an Act of ten years' standing, to insist that every box of butter sent out of the Dominion shall be up to quality and marked accordingly. At the Government grading stores at the shipping ports, where the butter is handled and stored at

the expense of the State as a concession to the industry, thousands of boxes arrive every day. They are exactly similar, all made of the tasteless native white pine and all holding an ounce or two more than 56 lb. They are spotlessly clean. The only difference visible in them is in the regular brand of the factory, which is impressed in ink or burned into the box. By the pencil marks on the corner a random box is selected from each churning and sent in to the grader. It may come from a factory which has possessed a first-grade reputation for ten years, or it may be from the last clearing in which the cowbell has been heard. That is immaterial to the grader. The stores are absolutely democratic. The butter has come for judgment, and it is judged on its individual quality. If there is anything wrong, the factory is advised of the defect, and by referring to the particular churning in which it occurred it can rectify it at once. Flavour, body, moisture, texture, colour, and salting are all material points.

So salutary was the effect of the independent grading by Government experts that within a few years of its commencement less than 5 per cent. of the butter entered for export to the United Kingdom was placed lower than first-class—that is to say, below eighty-eight points of excellence out of a possible one hundred.

By the time the grading is finished the bulk of the butter is stacked away in the refrigerating chamber below, where the ice crackles under the feet and the hoar-frost glistens in the electric light. The temperature is 20° of frost, as against a good 60° in the sun outside. It is sufficient to preserve the *status quo* until in a few days the boxes are shot along the gangway into the chambers of a full-powered steamer ready to sail for London. Butter is carried by sea at a temperature of 15° Fahr., cheese at 50°. A single one of the steamers which are leaving New Zealand ports every week during the season for the "Home" market may take thirty or forty thousand cases, landing the butter in London six weeks later in exactly the condition in which it was shipped.

The first payment to the farmer who supplies the milk is the ruling price for butter-fat, the proportion of which in his milk is assessed on a composite analysis of samples, taken throughout the week. If the test is consistently low, the chances are that some supplier who is raising pigs and calves is cheating his neighbours by taking back good skim-milk in return for his own well-watered supply, but that sort of thing has long since been reduced to a minimum. Factories are now so well managed that not only is the highest justifiable price paid to the supplier for his butter-fat, but the shareholders, who are also suppliers, invariably receive a dividend on the year's working.

The following table shows the growth of the butter industry :—

EXPORT OF BUTTER.

	Cwt.	Value.
Before refrigeration, 1872-81 (ten years)...	17,447	£66,588
After refrigeration, 1882-91 (ten years) ...	243,211	961,597
1898-1907 (ten years)	2,414,913	11,086,981
1907 (single year)	328,441	1,615,981

The growth of the whole dairy industry also appears in this table :—

	Census 1891.	Census 1906.
Number of factories	74	264
„ employees	269	1,484
Wages paid	£14,928	£131,123

By far the majority of the factories are in the North Island, which is climatically the better adapted for dairying. Besides the above there were at the last census 384 private registered dairies, of which 228 were in the province of Taranaki. The skimming stations, which are not included in the above figures, now number 463, and the butter and cheese factories themselves have increased since the census to 321.

Unlike the butter industry, cheese had its principal seat in the South Island, where factories thrived at a very early date, some time, indeed, before the advent of

refrigeration. But more recently butter factories in the North have been encouraged to instal cheese plants and even occasionally to turn exclusively to cheese-making. At present, slightly a majority of the cheese factories are in the North Island, though Otago still stands first amongst the provinces.

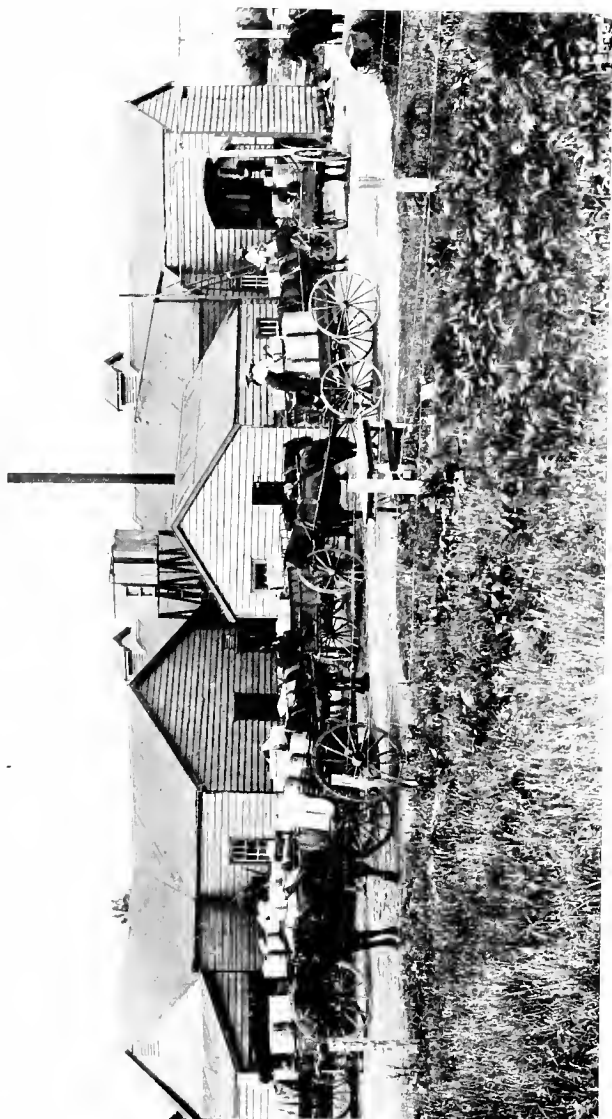
In cheese-making the process is much simpler. The milk, after weighing and straining, is immediately heated and curded by means of rennet. Thence onward it is merely a matter of working. A large factory, such as that at Dalefield (Wairarapa), can each day during the season put two tons of first-class cheese into the store-rooms, where it ripens for some time before going into the hold of the steamer. This product, too, has to run the gauntlet of the Government graders, by whom more than 90 per cent. is now graded as first-class. For cheese-making the farmers are, of course, paid for the full milk. The whey, which is used for pig-feed, is their perquisite. Generally speaking, the milk of a cow is worth about the same in a year whether made into butter or cheese.

The following table shows the growth of the cheese export (taking no cognisance of the greatly increased local consumption) :—

EXPORT OF CHEESE.

	Cwt.	Value.
Before refrigeration, 1872-81 (ten years)...	17,971	£55,567
After refrigeration, 1882-91 (ten years) ...	215,461	495,741
1898-1907 (ten years)	1,035,947	2,497,941
1907 (single year)	236,833	662,355

As gradually the Australian farmers took to dairying on scientific lines, the market for New Zealand produce in Australia soon disappeared. There was no service of refrigerated steamers between the two countries, and the butter lost condition on the journey. In New Zealand, moreover, the seasons practically coincided as to date with those of Australia, so that the local product came into competition. At the other side of the world the



A WAIKATO CREAMERY AND BUTTER FACTORY, CAPABLE OF MAKING TWO TONS OF BUTTER PER DAY.

seasons were exactly opposite. London's great suppliers, Denmark, Canada, and Siberia, were out of action at the very time of year when New Zealand was in full swing, and it was a matter of only a few years for the Dominion to obtain an unassailable position there. The output now available for exportation is either sold to agents on the spot or goes to London on consignment. Less than 1 per cent. finds its way to other countries. In many cases the factories receive as much as 10d. or 11d. per pound in the Dominion, a price that signifies the triumph of organisation, scientific working and unsurpassed conditions of climate and soil. But the later rivals of the Dominion enjoy some important advantages. From Australia, where the season is earlier and the transport shorter, the butter reaches London a month earlier. In the Argentine the season is the same, but the transport is three weeks shorter. It is the superior knowledge of the New Zealand dairymen and their superior natural conditions which have enabled the Dominion to maintain its position.

In common with many other industries, dairying in New Zealand owes a great deal to the sympathetic assistance of the Government. In the early days monetary help was given towards the establishment of factories, and since then the veterinary and instructional staffs of the Department of Agriculture have been increased from time to time to provide for a close system of inspection of factories and herds and advanced education. The determination of the Government to place its imprimatur on all produce tendered for export has long since been approved by its most strenuous opponents, and to-day the State is being importuned to carry out a new work which would probably be regarded in some countries as a fit activity for the companies themselves. Hitherto dairy farmers have been greatly handicapped by the absence of any scientific station for experimental and research work in connection with the industry. The only data upon which they can work is obtained from the experiment stations of their competitors in Canada

and Denmark. Such experiments as have been carried out in New Zealand are due to the enthusiasm of individual farmers or agricultural colleges not specially adapted for dairy work. The Government has now decided to establish at Palmerston North a station which must undoubtedly show the way to immense economies and increased efficiency in the industry.

The selection of herds for dairy purposes has been a good deal retarded and complicated by the desire of farmers to produce beef and milk from the same animal. As a general rule the herds of New Zealand were utterly nondescript until a few years ago. The occasional demand for beef, and the absence of any intensity of competition in dairying, produced herds of no breeding whatever. The farmer, while professedly a dairyman, always desired to have two strings to his bow—to keep cattle of such a class that if the calves were useless for the dairy they might be turned to good account as beef. In view of all the ups and downs of the two industries, farmers have not yet discovered whether it pays better to grow beef or to milk cows.

The typical cow for the dual purpose, the Shorthorn, has the virtues of the milker and the beef cow, but it requires proportionately more feed than the Jersey or the Holstein, which are much better milch cows. Many dairymen in New Zealand are still milking cows at a dead loss, a condition of things which the Danes eliminated many years ago. The fact that the average yield of New Zealand dairy cows is under 500 gallons a year may not fairly be held up in comparison with the 800 gallons of the Danish herds, for the simple reason that a great deal of the dairying country in New Zealand is unimproved, almost virgin country. In the North Island, in particular, thousands of cattle subsist all the year round on natural grasses. Nevertheless it is recognised that by careful culling of unprofitable cattle the yield of butter-fat can probably be increased by from 30 to 50 per cent. The older established and well-to-do farmers are already paying attention to this matter, and there is a gradual

tendency all over the country to forsake the false ideal of the dual-purpose cow. Everywhere there are now splendid herds of dairy cows, either pure-bred or crosses in which the Jersey, Holstein, and Ayrshire are predominant. There are also, for general purposes, some of the finest pure-bred herds in the world, founded on the most valued strains and built up regardless of expense. Both private individuals and the State possess some splendid stud stock imported for the special purpose of disseminating their strains far and wide.

The expansion of the New Zealand herds in sympathy with the improvement of dairying has been remarkable. In 1881 there were less than 700,000 cattle of all kinds in the country. To-day there are nearly two millions, and the dairy cattle alone number more than 600,000. More than two-thirds of these are in the North Island. Some idea of the extent of dual-purpose breeding may be gathered from the following analysis of the 82,913 pure-bred cattle which are used for stud or dairy purposes :—

							Number.
Shorthorn	...	...	...	...	...	...	45,948
Hereford	...	...	...	...	...	...	9,564
Polled Angus...	...	...	...	...	...	...	9,103
Jersey	...	...	...	...	...	...	5,957
Ayrshire	...	...	...	...	...	...	4,687
Other breeds	...	...	...	...	...	...	7,654

The following table shows the cattle census at different periods :—

1858	...	...	...	...	...	...	137,204
1867	...	...	...	...	...	...	312,835
1878	...	...	...	...	...	...	578,430
1886	...	...	...	...	...	...	853,358
1898	...	...	...	...	...	...	1,206,165
1908 (April)	...	...	...	...	...	...	1,816,299

Without the very necessary antidote of a vigilant veterinary staff this rapid development of herds in a new and sparsely peopled country would undoubtedly have led to a serious degeneration in the health and

physique of the cattle. The profits of milking were so rapid that small dairymen were encouraged to keep heifer calves regardless of constitution. In-bred, fed on skim-milk and brought into profit as early as possible, the dairy cattle showed a decided tendency to deterioration until the veterinary staff was armed with summary authority to cause the destruction of animals which were developing tubercular emaciation. These powers have been so drastically exercised that the New Zealand herds are probably to-day the cleanest and healthiest in the world. When the last thorough survey was made, four years ago, the percentage of disease was from 3·7 to 10. In Europe at the same date the percentage ranged from 15 to 28.

The most necessary development before the dairymen of New Zealand is the growing of winter feed to enable the cows to be better nourished and brought into milk sufficiently early to reap the profits of the early market in England, instead of being compelled, as at present, to come in after Australia.

Dairying has given a new value to land in New Zealand which was formerly used only for depasturing sheep, and also to much of the improved land of the plains and the accessible valleys. For some years it was regarded as a means of making money quickly, and the high prices ruling for butter and cheese encouraged this idea, with the natural result that land suited for dairying changed hands over and over again at steadily increasing prices. The inflation was, needless to say, out of all proportion to the actual value of the land, and the upshot was that men found themselves in possession of holdings which had cost them too much and which could only be made to pay by the utilisation of the unpaid labour of their children. The pinch was felt somewhat severely for a time, but one or two checks and the increased intensity of competition have now reduced the industry to a more stable basis, and land has returned to fair values. A few years ago it was no uncommon thing for dairymen to pay £40 an acre for their land.

CHAPTER XII

THE SEEDS OF A REVOLUTION

Development at a standstill—Decadence of the gold-fields—State of New Zealand in 1870—The isolation of the provinces—Provincial jealousies—Mr. Vogel's policy of development—Liberal borrowing—Immigration from Europe—Expenditure of borrowed money—Abolition of the provinces—Dazzling prosperity and reckless expenditure—Speculation and land-grabbing—The labour market glutted—Cries of "Halt!"—Imposition and repeal of the land tax—Depression and disaster—Destitution of the immigrants—Spurious absorption of population—Fictitious industries—Sweating and distress—Loss of population.

THE year 1870 marked the commencement of a new epoch in the history of the colony. After the original settlement of the provinces immigration was repeatedly checked by rumours of wars with the Maori and by the substantiated stories of distress amongst the poorer classes of the settlers—causes in themselves sufficient to deter any but the most courageous from leaving their homes to settle in the colony.

In 1860 there were only 80,000 white people in New Zealand. The following year gold-veins of great wealth were discovered at Gabriel's Gully, in Otago, and a "rush" set towards it which in four years brought 100,000 persons to New Zealand from California, England, Ireland, and Australia. The excitement was renewed three years later by the opening of another field on the West Coast of the South Island. Steamers and sailing ships ran direct from the great centres of Australia to the "bar" harbours of the coast. Population swarmed in. Large and busy townships grew up as the commercial centres of the narrow coastal strip in which the

gold-fields were situated. This field became a world to itself, and, obtaining administrative separation from the province of Canterbury, the miners erected an autonomous province so far as local government was concerned. But the glories of the West Coast also waned. Thousands of the miners sadly discovered that it was only a small minority who could hope to make a fortune and, pressed by the high price of provisions and the roughness of the life, they deserted the fields. Both in Otago and Westland hundreds of claims were abandoned. Townships were deserted, and where once the hum of prosperity by day and the midnight revels of the miners held sway now empty *whares*,¹ dismal mounds of gravel, and overgrown shafts testified to the disappointed hopes of yesterday. The population of New Zealand had increased from 79,000 whites in 1860 to 237,000 in 1869, and the gold output, which was worth only £750,000 in 1861, was now valued at £2,362,000; but it had reached its climax of £2,844,000 in 1866, and thence onwards the fields steadily diminished both in extent and production until in 1887 the output again touched the bed-rock of three-quarters of a million. The gold bubble was burst, but New Zealand was the richer for fields that are now adding two millions yearly to her wealth, and for an accession of population of the very finest and most independent type—men who in the next few decades amply refuted the suspicions with which their advent was regarded by the quiet-going Scots and English settlers of Otago and Canterbury. The majority of them were absorbed permanently in the population of the colony, employment being found for them on the land, in the new industries of the towns, or in the wars of the North Island.

Removed from the seat of the native wars, the South Island enjoyed without alloy the prosperity which followed the opening of the gold-fields. In the North Island, on the other hand, the Maori insurrections had strangled the development of four provinces, and when

¹ Huts of native construction.

they finally came to a close the settlements of the *pakeha* were confined to the vicinity of the seaports and to the fertile valleys of rivers.

What sort of a community was it that then essayed to build up a nation on such uncertain foundations? Ten distinct settlements, scattered over an area as large as England and Scotland together, gave domicile to the quarter of a million whites who peopled the colony of New Zealand. The most remote of the provinces were a thousand miles apart. There were no roads to connect them, and the service of brigs and schooners, with an occasional small steamer, was so uncertain that a few years earlier the capital had been moved from Auckland to Wellington to make the seat of government as central as possible. When Parliament met at Auckland it sometimes took the Southern representatives a month to arrive there by the devious route of Port Jackson, in New South Wales. There were only forty-six miles of railway in the whole country—small isolated lengths belonging to the provinces, and serving only local purposes. The electric telegraph lines amounted to only 1,887 miles, and there was as yet no connection by submarine cable with the outside world, the nearest point of which was Sydney, 1,200 miles distant.

Socially, the severance of the provinces was complete. The principal of them had been established individually direct from the Old World, and each party of pilgrims had brought its own ideals and institutions. The separate provinces lived under a jealously guarded system of autonomy provided by the Constitution Act of 1852. Many of them were rivals: all were more or less insular in their views. The land regulations were entirely different. Public institutions, too, sadly lacked uniformity. In some of the provinces education was unendowed and scarcely recognised; in one—the Scots province of Otago—the system was already a credit to any civilised community, and was attracting young men from all over the country. There was no national feeling. Except for a strong and common

resentment of the treatment of the colony by the Imperial Government, the provinces were all absorbed in their own affairs, in the struggle to make roads with insufficient revenue and to conserve their local rights against the encroachments of the General Government at Wellington.

The exports, valued at $4\frac{1}{2}$ millions sterling, were entirely the product of the primary industries—gold-mining and grazing. There was no export of meat, and practically none of dairy produce. It was a primitive community, meeting all its requirements by importation, and the imports exceeded the exports. There was a public debt of eight millions. The South Island had not been more than scratched on the surface; in the North resources equally rich had scarcely been touched. There was a tremendous profusion of natural wealth. The bush lay ready to the axe, the hillside and the plain to the plough. Apart from its political disintegration, the colony was normal and thoroughly healthy in itself. It had absorbed the rush of miners with complete success. There was no overcrowding, and only that intermittent modicum of unemployment which is inseparable from the economy of an agricultural people. There were no great monopolies, and now, happily, there was no war. Development and wealth awaited two agents—men and money. Meantime the country was at a standstill.

With the time came the man. Mr. Julius Vogel, who first held office as a member of the Fox Cabinet in 1869, was a man of great constructive ability, energy, and self-confidence. He lacked caution to the extent of being rash, but, having an almost instinctive knowledge of figures, great determination, and tenacity, he was always able to lead the House of Representatives while he held office as Treasurer. Long before he became Premier, in 1873, he was in reality leading the Government. His scheme for lifting New Zealand out of the slough of despond into which it had fallen by 1870 was not an original one. Eight years earlier a very able statesman

had put forward practically the same policy, but the war stood inexorably in the way of immigration and of the fundamental necessity of borrowing money to carry it out. The scheme which Mr. Vogel promulgated involved the borrowing of a sum of £10,000,000, to be expended over a period of ten years in systematically opening up the country. The principal means to this end was the introduction of immigrants of the agricultural and artisan classes from the United Kingdom and the North of Europe. They were to be given employment primarily in the construction of a trunk line of railway from end to end of each island, with main roads as feeders, telegraph lines to connect the remote portions of the colony, and races to carry water to the gold-fields. Six million acres of land were to be set aside as the endowment of the railways—2½ million acres to be disposed of to pay for the line and the remaining 3½ millions to be sold or let on pastoral occupation in reduction of the capital cost. The intention was that the immigrants who were employed in the construction of the railways should afterwards have the opportunity of settling on this or other land purchased by the Government from the native owners. Unfortunately for the policy, Mr. Vogel feared the opposition of the land-owning class and the Provincialists—all-powerful in the early days of the colony—and to propitiate them he abandoned the whole of that part of his proposals which dealt with the reservation of land and with the protection of industries which should give employment to the artisans and mechanics he wished to import. The consequences were fatal, but for the time the policy was inaugurated with *éclat*.

New Zealand was on the eve of a great development. Hitherto immigration had been the concern of the Provincial Councils, and in some cases it was but indifferently managed. Now, for the first time, it became the function of the General Government, and the General Government entered into it with vigour and enthusiasm. It despatched to Europe two commissioners—the Hon.

Dr. Featherston, who had been the first Superintendent of the Province of Wellington, and was a member of the Fox Ministry, and Sir F. H. Dillon Bell, who had served on the Provincial Councils of Otago and Wellington, and as a member of the Ministry.

In a few months they directed a strong stream of emigration from England, Scotland, and Ireland towards New Zealand. The emigrants were judiciously selected for their physical and moral fitness. Labourers, artisans, and farm servants were freely obtained in the three kingdoms. Scotland yielded many sturdy crofters and fishermen, and Cornwall and Lancashire many miners for the railway works. Encouraged by the experience of South Africa and South Australia, the Commissioners visited Northern Europe and despatched thousands of the most excellent settlers from among the sawyers and agriculturists of Scandinavia and Germany. Little more than good character and physical fitness were expected of the emigrants. If these were satisfactory, the New Zealand Government gave liberally out of its borrowed money to assist the prospective settlers in their passages. Immigrants poured into the country and were greedily seized upon by the provinces, only too eager to get people to settle their waste lands. In thirteen years the population of the colony doubled itself. The great majority of the immigrants were of excellent character. It was only after the master personality of Vogel was removed from the actual administration that laxity and errors crept in.

For many years it had been felt that New Zealand was over-governed. A population of a quarter of a million supported twelve distinct legislative Houses; and while it was an undoubted advantage in the earliest days that local works should be administered by provincial bodies, it was now a manifest disadvantage that the Crown lands, timber resources, police, and immigration should be administered by so many different bodies working independently of each other and without uniformity. The General Government felt too, very keenly, the disadvan-



LOGS FLOATING OVER THE WAIRERE FALLS, ON THE WAIROA RIVER.

tage at which it was placed in borrowing money when the securities the colony had to offer were so administered, and Vogel had no compunction when he discovered the true import of this disintegration in moving for the abolition of the Provincial Governments. During the five years which his development policy had already run the provinces had profited tremendously by the influx of people. It was regarded as practically certain in 1870 that the provincial system was doomed, and the Provincial Councils, making hay while the sun shone, relaxed their land regulations and filled their coffers with the proceeds of sales.

The end came in 1875, when the provinces were abolished after a fierce contest. Immediately the pendulum swung to the other extreme. The County Councils were no substitute for the provincial legislatures so far as the control of public works was concerned. They were not endowed with the revenue from Crown lands. Parliament became an immense Board of Works, now in a position to borrow more liberally, though not yet independent of the support of the Provincialists. The provinces were rapacious for the expenditure of public money; and it was spent, extravagantly and sometimes wastefully. The provinces had already realised upon much of the land that was to have been the endowment of the railway, and loans had to be raised year by year to carry on the work that should have been self-supporting. Money flowed in an apparently endless stream. Railways were creeping all over the country, and there was an abundance of employment for all. New Zealand had entered on an era of dazzling prosperity, and, casting caution to the winds, the people went full speed ahead. In nine years, from 1872 to 1881, the public debt of the colony increased from ten to twenty-eight millions, while the population at the end of the period was only half a million.

While people were thus pouring into the country the two expedients which Vogel had proposed for their permanent settlement failed to materialise. Agricultural

and industrial development both hung fire, and the immigrants found it more difficult than they had expected to establish themselves in positions of assured permanency. Every country which has been colonised by the English race, with the aspiration of producing a new England in the wilds, has sooner or later, through lack of balance between the different classes of the community, fallen victim to its ideals. It may be that labour is superabundant, without the necessary capital to give it employment; or, on the other hand, capital, being plentiful, either appropriates the great resources of the country and denies employment or is itself hampered for lack of labour. Almost all the British colonies have at one time of their history been dominated by a class of wealthy landowners, many of them the lords of extensive areas which they acquired without making an adequate return to the consolidated revenue, either by way of rental or in payment for the fee simple. As a concomitant of early settlement, "squatting" is not an unmixed evil. Colonial Governments are often only too willing in their struggling days to offer large areas of land at nominal prices for the dual purpose of raising revenue and inducing persons of capital to settle in the country. Struggling small settlers have received immense benefits from the presence in their midst of large landholders who are able to give employment and circulate money. As the colonies grow the smaller settlers achieve some measure of independence. Employment is more abundant in the construction of roads and the felling of bush, and eventually the time comes when there is a demand for land for closer settlement. The small settlers and the great landholders come into conflict, and upon the adjustment depends the future of the colony.

What happened in New Zealand in the seventies was not covered by the definition of "squatting," but it had an even more baneful effect on the social condition of the country. Blindly eager to realise their landed resources, and honestly desirous, it must be admitted, to

encourage the immigrants to settle down, the provinces threw large areas of land on the market. It was eagerly bought up by the capitalist landholders, and there was an instantaneous rise in values. Population began to pour in, large sums of public money were expended in the construction of roads and railways. Prices rose and continued to rise. Those of the immigrants who were fortunate enough to possess capital secured their land early, but the great majority were almost penniless, and before they had time to look about them the market had advanced far beyond their means. Thousands who had been encouraged to come to the country in the hope of obtaining land found themselves utterly unable to compete with the wealthy classes, for whom the Crown lands of the colony had long been a happy hunting-ground. Prices soared higher and higher. The speculation was intoxicating, and many smaller men raised money on mortgage and bought at high prices in the hope of selling at an early profit. The market was closed absolutely to the genuine small settler, and there was a rapid aggregation of land in the hands of the few.

In Canterbury the case of the small men was worse than hopeless. In the earlier days of the province the price of land was for a time as low as 10s. an acre, and vast areas on what was then the outskirts of civilisation were bought up by the capitalists. Now the price was £2 an acre, and any selector could take up as many sections as he desired, wherever he desired, and with no restriction as to area so long as they were of a minimum of twenty acres. Anticipating the advent of smaller farmers desiring allotments, they "gridironed" the country, picking the land in strips and leaving intervening acres of not more than 19½ acres, so that the smaller men could not settle in their midst. In the North Island things were scarcely so bad. The frequency of native disturbances had checked "squatting" and prompted the establishment on the land of bodies of military settlers, who worked holdings of moderate size, and held themselves ready for service if required. Then again a number of

special settlements of small holdings had been formed by bodies of men in England and Ireland, and the emigrants on arrival had taken up their sections without being subjected to outside competition. These settlements were the genesis of some of the most prosperous communities of freeholders in New Zealand to-day. The Provincial Councils of Wellington and Hawke's Bay, too, had wisely settled most of the Scandinavian immigrants on small allotments in the Seventy Mile Bush, where they were given employment in the construction of the arterial road to assist them in financing their holdings. It was a most judicious experiment. The Scandinavians successfully withstood the troubles under which so many of their fellow-immigrants in the South Island came to grief.

Engrossed in the experiment to which it was committed, the Government of the day too easily persuaded itself that the emigrants who were crowding to its shores were being absorbed, and it pushed on, cheerfully regardless of the day when the fountain of borrowing would dry up and these artisans and farm labourers would clamour for work and land. For the moment all was well. Railways were being pushed ahead all over the country; roads, bridges and water-races were being constructed, and land was fetching fabulous prices. Production expanded; exports and imports increased.

In seven years New Zealand had nominally increased her agricultural class by 230 per cent. and her artisan class by 270 per cent.; and certain historians, looking at the mere comparison of figures, have declared that the period from 1870 to 1880 was one of unexampled prosperity for the colony.

At such a time, when the nation was still impatient of the delays and checks which its development had so often encountered, it was unpopular to argue that a quarter of a million people could not, without serious economic disturbance, absorb a sudden accession of almost half its own numbers. On the one hand the land had become the preserve of the few; on the other the manufacturing industries, of which Vogel had expected

so much, were not yet out of a precarious infancy. From the very beginning New Zealand had dutifully imported to meet all the requirements of the colonists, and the customs tariff existed purely for the purpose of providing revenue. It was, indeed, almost the only assured source of income for State purposes, and when the Vogel policy had been in operation for ten years the custom-house was still furnishing three-fourths of the revenue of the colony. There was no pretence of protection. Such industries as there were owed their existence entirely to the phenomenal activity of the period, and stood in jeopardy the moment a depression struck the colony. But who was there bold enough, in that time of intoxication, to cry "Halt!" and utter a warning against the headlong career of the Continuous Ministry?

It was the battle for the existence of the provinces that led to the dramatic re-entry into public life of Sir George Grey, whose distinguished career as representative of the Crown in South Africa, South Australia, and New Zealand (where he was twice Governor) had been terminated by a series of stormy controversies with Downing Street. Worn out by the acrimonies and the physical stress of thirty years of colonial life, he had retired to an idyllic seclusion at the island of Kawau, near Auckland, and was engrossed in the study of Polynesian mythology when the menace to his beloved provincial institutions called him to arms. He was elected Superintendent of the province of Auckland and one of its representatives in the General Assembly. Instinctively the Provincialists arrayed themselves around him, and for the first time in the history of parliamentary government in New Zealand there was a strong, organised opposition. Grey was a man of singularly acute foresight, and although his faculties were somewhat impaired by age, and his temperament was intolerant and sometimes violent, there was still a magnetism about his personality that made him a very dangerous opponent.

Associated with Ireland in his early manhood, he was convinced that the troubles of that unhappy country were

largely due to the tenure of the land, and throughout his official career he consistently fought against the land monopolists in the new countries of which he was successively Governor. His determination to conserve the patrimony of the people had already, during his governorship of New Zealand, brought him into conflict with the landed class, and it was no new jihad for which he now left his retirement. He was one of the minority who were bold enough to say that all this apparent prosperity—the lavish expenditure of borrowed money and the reckless introduction of artisans and farm labourers—was an absolute danger to the colony so long as both land and industrial employment were withheld. The one thing uppermost in his mind as requisite for the salvation of the colony from the condition of insolvency into which he believed it was rushing was the unlocking of the lands for settlement by the smaller yeomen farmers. Aggregation was going on at an alarming rate. In a period of five years the number of holdings of more than ten thousand acres doubled.

Doubly embarrassed in its finances by the loss of the magician Vogel (who went to London as Agent-General for the colony in 1876), the Government was defeated on a want-of-confidence motion, and Grey formed a Ministry. The weapon he selected for the achievement of his principal reform was a tax on land values, and before he had been in office a year he succeeded in passing the necessary legislation. Values fell slightly, and there was an instant bursting up of many of the largest estates in order to avoid the impost. The division was not in all cases the genuine disintegration that Grey had anticipated, but it boded well for the landless farmers when land should become available at reasonable market values. Reducing the customs tariff shortly afterwards, Grey completely altered the incidence of taxation; and simultaneously the prospects of the needy immigrants improved. Before he could carry out more of his comprehensive programme, however, his hasty temper and petulant intolerance had estranged many of his own

supporters. Deserted and disheartened, he was defeated in 1879, and went sadly out of office, bequeathing to his opponent, Sir John Hall, a programme which the latter frankly adopted.

By this time matters had arrived at a sorry pass. In the year in which Grey went out of office New Zealand suffered a terrible depression. The prices of produce fell alarmingly, and the land boom, of course, collapsed. Advances were called in by the banks, which suddenly found themselves in possession of thousands of acres of land for which they had no particular use. Private borrowers were compelled to realise on a falling market. Destitution and idleness confronted thousands, not only of the needy immigrants but also of those who, having obtained financial assistance to buy land at inflated prices, had been compelled to surrender. With the curtailment of the spending power of the country, both public and private, employment shrank and the outlook was as dark as it could well be. Nothing that could be done by legislation at the eleventh hour could remedy an evil which had its roots in an economic condition of many years' standing.

The Hall Ministry had before it as difficult a task as any New Zealand Government ever had to cope with. Prices of land and produce fell steadily, unemployment increased, and whatever confidence still remained in the ability of the country to settle its new population without an upheaval became very weak indeed. The land tax was repealed, and in its stead the Government imposed a tax on all property, real and personal, exclusive of income. An Act was passed qualifying every resident male twenty-one years of age to vote, but the qualification was both residential and freehold, and the landholders were thus enabled to exercise votes in every district in which they held land. The reaction was complete. The land was as securely locked up as before. The horizon was as dark as ever. Still people were flocking to the country. The three years of the Hall Ministry was probably one of the severest tests the colony's finances were ever put

to. There was still a heavy expenditure of loan money, but on the other hand taxation was increased, and rigid economy was practised. By 1882 the Colonial Treasurer (Major Atkinson) was able to congratulate the colony on having recovered from the depression. Still it was the mass of the people who contributed most to the revenue. Out of a total revenue from taxation of £1,717,000, the customs furnished £1,276,000, and the property tax £257,000—twice as much as had been derived from the land tax. At this time more than nine million acres of land was in the hands of 490 men, and there were 250 freehold estates of more than 10,000 acres each, the aggregate area being $7\frac{1}{2}$ million acres.

With evenly balanced parties, Parliament was powerless in the next few years to cope with the evils that multiplied upon the unfortunate country. It is unnecessary to trace the melancholy ins and outs of the Conservatives and the new Liberals. Legislation and administration alike amounted to a mere succession of expedients. Loan expenditure kept the pot boiling and provided some employment for the army of unsettled persons who drifted about, but every winter the question became more acute. The excess of immigration over emigration fell away to almost zero. Every effort was made to start new industries, and to find new markets for produce, but even where successful the benefit could not be reaped for some years to come. The country now discovered how it had suffered by the mutilation of Vogel's original scheme of development. Not only was employment so scarce that hundreds of the more efficient workers had to leave the colony to find a market for their skill, but the industries that survived the depression were flourishing in a fictitious manner. Unprotected from the competition of English and foreign goods, which were dumped into New Zealand almost free of duty, the local manufacturers had to make reprisals upon the labour which was, unfortunately, all too abundant. Wages fell. Married men with families, compelled to choose between work at low pay and starvation, were

at the mercy of circumstances. Boys came into competition with their fathers. Apprenticeships were ignored in most cases, or merely used by employers to get labour cheap. When the term expired the youths had either to go on at boys' wages or to throw up their employment. The choice was obvious, and wages fell steadily. Industries became overrun with boy labour, and the prospects of competent men who were unwilling to work for low wages diminished *pari passu*. Female labour was similarly exploited. Thousands of girls were employed for six months or longer without remuneration, and discharged as soon as their efficiency justified their demand for payment. A minority were kept on at less than a living wage, and another wretched crop, compelled by the inability of the chief breadwinners to get employment, filled the vacancies. Sub-contracting gave rise to "sweating." The cutting was remorseless. The lack of work for men drove thousands of respectable families into the cut-throat competition. The only consideration of the manufacturers was to secure labour at the lowest cost; of the workers, to secure employment at any cost. The burden of the industrial strife fell most heavily on the weak. Children and women were exploited because the industries could not pay wages to men.

All the glory of the seventies had passed away. New Zealand was in a state of the utmost depression. Legislation was quite powerless to remedy evils which were economic and not merely political. Many colonies have had similar crises to face; but in New Zealand a position which would naturally have arisen at a certain stage of the colony's development had been aggravated incalculably by the reckless and extravagant importation of certain classes of immigrants to whom the necessary avenues of occupation were closed. Thousands of disappointed men, efficient, industrious, and temperate, left the colony in despair. Of those who remained many had emigrated from the Old World a few years earlier, full of hope and enthusiasm. They were now inconsolable agitators. A revolution was at hand.

CHAPTER XIII

THE LAND FOR THE PEOPLE

The sempiternal problem—An experimental laboratory—The land-sharks—Limitation of area—Governor Hobson's task—The policy of Sir George Grey—To the opposite extreme—Distribution of the land—Coming to a reckoning—Expedients of the eighties—The Liberal policy, 1891—Land taxation—Closer settlement—The agricultural epoch—Lease in perpetuity—Compulsory acquisition of estates—The Advances to Settlers Office, and cheap money—"Breaking in" the land—The prospects of the pioneer—A fashionable occupation—Increase of holdings—Expansion of production—A revision of policy—National endowments—Closer settlement.

POSSIBLY there is no question that has been a more persistent source of dispute amongst the younger nations of the Empire than the ownership and tenure of land. In the older countries the problem is often regarded—unfortunately, as it seems to the Antipodean observer—as being settled in perpetuity by the hereditary practice of past ages, by customs of traditional antiquity, irrespective of any of the needs of to-day. But young countries are not so complacent. Owning no traditions indigenous to their soil, they are apt to be intolerant of the claims of custom and practice, to regard the lands of the State as the common heritage of all, and to aim solely at the highest possible utility from their acres. In their remedies and reforms they are inclined, if they consider it necessary, to be brutally sweeping.

Thus it is that the daughter States of the British Empire, which are practically the only countries settled by civilised communities during the past century, afford economists the most interesting expositions of the land problem in its varying forms. In the six States of

Australia and in New Zealand we have in operation most of the better known systems of land tenure, with the notable exception of the law of entail, by which the land question in England is so hopelessly involved. In the smaller of the Antipodean States the land question naturally pressed most keenly, inasmuch as there the available areas were soonest absorbed by the large squatters. Under this head New Zealand and Victoria are interesting studies. New Zealand was the younger, the less homogeneous, and the less hampered by precedent when she was confronted by the twin problems of closer settlement and the acquisition of native lands. In her manner of dealing with them she vindicated the title—or is it the “epithet”?—of the laboratory of economic experiments, and furnished to economists in both worlds a series of demonstrations which are every day justifying themselves and gaining imitators.

On the first phase of land settlement in New Zealand it is, fortunately, not necessary to dwell, because in the Governors of New South Wales and New Zealand the desire to do justice towards a barbarous native race overruled the importunities of clamouring speculators who constituted the vanguard of civilisation. In that perilous period, after New Zealand was ascertained to be a fertile land with an equable climate—the appointed home of a white race—and before the Imperial Government could be induced to take possession of it, scores of avaricious squatters and land-sharks swarmed across the Tasman Sea from Australia, and made “purchases” from the natives. On the flimsiest consideration vast areas were claimed as timber reserves or for their prospective value as pasture land. Before a single expedition of immigrants arrived, eight individuals or companies claimed to have acquired sixty million acres, or more than five-sixths of the whole area of the country. One gentleman claimed to have purchased for £160—paid in kind—160 miles of coast-line, and a hinterland extending as far back as he considered convenient. Four claimants demanded the South Island as their own, in consideration of a few

hundred pounds in money and a life annuity to the ceding chiefs. An authority^{*} who came on the scene shortly afterwards wrote :—

“At the time the land fever, in its different phases of ‘sharking,’ jobbing, and *bonâ-fide* speculation, literally raged in New Zealand. Almost every captain of a ship on arriving at Sydney from New Zealand exhibited a piece of paper with a tattooed native head rudely drawn on it, which he described as the title-deed of an estate bought for a few muskets, hatchets, or blankets. Other captains were literally supplied in Sydney with blank deeds of ‘feoffment’ for the use of these purchasers, and as the Government had a fixed price of 5s., and afterwards 12s., per acre on land in Australia, adventurers crowded to New Zealand, hoping there, under cover of the Declaration of Independence, 1835, to pursue their schemes with impunity.”

The Governor of New South Wales was given jurisdiction rather late in the day, and until 1840 had nothing to guide him in dealing with the land-sharks. As early as 1832 Lord Goderich had commented thus philanthropically on the reports he had received :—

“It is impossible to read without shame and indignation the details disclosed by these transactions. Unless some decisive measure of protection is afforded, New Zealand natives will fall to be added to the number of the barbarous tribes fallen sacrifice to their intercourse with civilised man, by whom the very name of Christianity is disgraced.”

But England was still deadly anxious to avoid being in any way sponsor for the welfare of the Maori. And while England hesitated the Wakefield school of colonisers was busy, by treatise and practice, educating the English mind on the necessity of a proper land policy for the new countries which were being settled.

Edward Gibbon Wakefield from the first opposed the free granting of land in the colonies. His idea was that

^{*} Mr. Alexander Mackay, a Commissioner appointed by the New Zealand Government to investigate the claims.

the land should always be sold at a sufficient price, and that the proceeds of the sale should be devoted to an emigration fund to bring more people to the colony. Official England did not go so far as this, but it heartily concurred in Governor Gipp's condemnation of the state of things existing in New Zealand, and the claims were forthwith declared invalid pending investigation by a Commissioner. In his instructions to this Commission the Governor definitely fixed a certain scale of prices, ranging from 6d. per acre in 1815 to 8s. in 1839, as reasonable payment for land bought at any particular time in that period. Unless approximately such payments could be proved to have been made, the grants would not be confirmed. In this reference, too, appeared the first limitation of area, a sure forecast of the advent of democratic government. The restriction of 2,560 acres appears very drastic when we consider that it originated with the Governor of New South Wales at a time when large holdings were so much the vogue in the Mother Colony.

The first thing that was done when New Zealand became part of the British dominions in 1840 was the conclusion of a compact with the Maori conserving to them all their ancestral rights in regard to lands, hunting-grounds, rivers, and so forth, and vesting in the Government the exclusive right of pre-emption. After this deed (the Treaty of Waitangi) had been ratified no fresh land claim could be recognised until a proper purchase from the natives was proved. What with this and the work of the Commission appointed by Governor Gipps,¹ a very small proportion of these extensive purchases was ratified,² and the colony embarked on its political life with its landed resources more or less intact, though hopelessly bound up in the meshes of native ownership.

¹ Reappointed when New Zealand was declared a separate colony.

One of the original claims, that of William Webster, an American subject, for half a million acres of land, is still being pressed by his descendants. The purchase was made about 1835, and the claim sets forth that it was validly effected before British sovereignty was proclaimed in the country and when the natives were recognised as an independent confederacy.

Governor Hobson had landed in 1840 in the midst of a scene of bitter conflict between the land-grabbers and the official conservators of the rights of the natives. Though suffering impaired health, he lacked nothing in courage and determination to do justice to the natives. It was his first act to conclude the Treaty of Waitangi, as a weapon against the despoliation of the Maori, and he entered with all the earnestness of a somewhat intolerant officialism into the fight with the speculators. It is one of the calamities of New Zealand's early history that he should have classed the New Zealand Company amongst the general ruck of land-grabbers. This organisation, the last of three attempts to colonise New Zealand through the medium of public companies, embodied the very essence of the pure Wakefield policy of colonisation. As has been explained in an earlier chapter, the Company came into conflict in England with a bureaucracy that frankly desired to have nothing further to do with colonies. Hobson was the nominee of that bureaucracy, and he landed in New Zealand prepared to class the Company amongst the inveterate enemies of the official view of colonisation. Unfortunately, again, he found, as if to support his predisposition, that the Company had, in defiance of the caveats of the Imperial Government, purchased from the natives an area of land as large as Ireland, for which it had paid, partly in money and partly in kind, about £9,000. This figure would not, of course, at all meet the requirements of Governor Gipps's scale.

In regard to the administration of the lands of new colonies Wakefield had always taught that what he called the "sufficient price" was an economic essential. The point of sufficiency, a varying one, was fixed so as to make the land at once available to colonists having money to invest, and yet not so cheap that the labourers, who naturally desired also to be landowners, might obtain their desire at once and so leave the market bare of labour. The proceeds of the sale of land should, he considered, be devoted to a fund for the encouragement

of immigration of the right class of persons to maintain the due proportions of an established society. Before Colonel Wakefield had actually purchased any land in New Zealand the Company in London had sold to intending emigrants orders representing a value of £100,000. When the emigrants arrived, they found the conflict raging between the Governor and the Company, and themselves unable to settle on their lands.

It took nearly three years for the Commissioner to deal with the land claims. In the meantime settlement was at a standstill. A few thousands of worthy men who had paid for their land were unable to occupy it and were herded together in the towns, harbouring their grievances and rapidly becoming malcontents. The Governor possessed the right to purchase land from the natives and make it available for settlement, but he had no money to do it with, and men who were anxious to buy in the most open and straightforward manner had to sit and twiddle their thumbs.

When the decision of the Commissioners was made known the claim of the Company was cut down from 20 million acres to 283,000. This was enough to settle their tenants on, but by now the feeling between Maori and *pakeha* was so strained that many of the immigrants hesitated to go out of the towns. After the claims of the land-sharks had been investigated and the full area allowed to those whose purchases had been approved, the residue of some hundreds of thousands of acres, which was definitely ascertained to have passed from the natives, became the perquisite of the Crown. This was practically all the land available for settlement. If the Government had wanted to kill in infancy the unwanted child, New Zealand, here was the instrument. For twenty years only the Government could purchase land from the Maori. There was no competition in the market, and so, of course, the Government secured the land cheap, hastily surveyed it, and resold it to men who were still waiting for their holdings.

Yet out of evil came good. New Zealand had never

been used as a dumping-ground for convicts, but its great natural resources attracted a swarm of sea-rovers and adventurers, one might almost say freebooters and buccaneers. Before the sovereignty of the Queen arrived it was their happy hunting-ground. Had it arrived in the person of a man over-ambitious for the future of his governance, burning to show great marks of progress at the end of his term, and therefore complacent towards "boomers" and amenable to the desires of unscrupulous exploiters, the economic future of New Zealand might have been sold in a decade to heartless monopolists. The very existence of the Maori race might have been bartered away for empty signs of immediate progress. But William Hobson was no such man. He had his faults, it is true, bequeathed to him in great measure by the administrators who sent him out, but his whole life and the whole force of his outstanding character were devoted to seeing justice done to the Maori race. And when he died, after nearly three years of arduous and heart-breaking and thankless work, the brigands who had been plundering the country and the natives had almost all fled. The worst, at any rate, had disappeared, while the better had become decent citizens.

After a short interregnum of chaos—Lieutenant Shortland, Administrator, 1842-3; Captain Fitzroy, Governor, 1843-5—another strong man came into office, Captain George Grey, the greatest pro-consul of the colonial empire. He found a legacy of despair. Wakefield's scheme of colonisation was already ruined by the removal of its foundations—the steady supply of land for disposal at the "sufficient price." What with the Treaty of Waitangi and the penury of the Government, there was, to all intents and purposes, no land in New Zealand at all. In 1841 the colonial revenue, chiefly from land sales, was £37,000; the following year land yielded £11,000, and in 1843 only £1,600.

Grey's advent was a magic touch. Backed by a decent military force, he put a summary end to two native wars, and then proceeded to sort out the land tangles. He was



WAIKATO REMOUNTS.

Ten thousand New Zealand horses of this stamp served in the South African War.

altogether better situated than his predecessor, but he was also a man of infinitely better calibre, and under him the colony made a real advance. The large areas of land which he purchased from the Maori and made available for settlement were now a decided attraction to men who had been reluctant to go out into the wilds while the natives still remained arrogant in the face of official weakness. Moreover, this land was cheaper than the "sufficient price" land of the impoverished Company. Sheep-farmers brought stock over from New South Wales and took them afield.

In Otago—the Scots province which was founded in 1848—the price of land was fixed at £2, but it had to be reduced before the pioneers could be induced to go far from Dunedin. In Canterbury it was £3. But in both of these provinces lands which had been held by the natives and did not come within the endowment of the settlement were sold cheaper. Thus it happened that early in the day some very large holdings were established in the South Island. The Canterbury Association was armed with rather extraordinary powers over an immense area of land, upon $2\frac{1}{2}$ million acres of which the Church of England could levy £1 an acre. Foreseeing that if action was not taken immediately the Association would be able to keep the price of land exclusively and permanently high, Grey with one stroke of his pen "reduced the price of public lands from £3 to 10s., and in the case of inferior land, 5s. per acre."

The land regulations of Grey had a mixed result. There was the initial virtue that small men—thrifty labourers or immigrant farmers—were able to get holdings without much difficulty at a fair price. Of this the settlements on the west side of the Wairarapa plains, Masterton, Carterton, and Greytown, are lasting examples. But there was a subsequent disadvantage. The old rule—anathema of the land-grabbers—limiting the area which could be held by a single individual, was omitted. As a natural consequence large runholders and squatters who were working on pastoral leases were able to buy up as

much land as they could pay for, to aggregate immense areas without let or hindrance. It was the swing of the pendulum to the other extreme. While the "sufficient price" of Wakefield's system had been used to make land a close preserve, the regulations of Grey provided no barrier of price or limitation to prevent a vast portion of the Crown lands falling into the hands of a few wealthy men. And so it did.

Grey's inspired biographer^{*} tells us that "Sir George Grey intended, as part of his plan, to impose a land tax, to prevent the acquisition of large areas of unoccupied land. But he had no power to frame such an Act, and could but leave it with his recommendation to public men in New Zealand." In this case Grey's foresight was sadly at fault, and a future generation had to retrieve the blunder. If he had only embodied the limitation of area, as he undoubtedly had power to do, the regulations would have been entirely excellent. As it was they wrought the very evils which were most abhorrent to his democratic mind—evils which he assailed with all the courage and success of his youth when later he entered the New Zealand Parliament and became Premier of the colony.

It is unnecessary to dwell further on the regulations of this time except to say that they encouraged settlers, good and bad, to go out from the towns on to the land, and filled the coffers of the Provincial Governments to overflowing. In 1862 the Crown waived its right of pre-emption over native lands, and direct dealings with the Maori commenced. They grew to an alarming extent, particularly under an inscrutable rule of the Native Land Court (set up in 1865), which would not allow more than ten natives to be named in a communistic title, and permitted these ten to negotiate the alienation of the land. Free trade certainly gave the Maori a better price for the land than the Government, without fear of competition, was likely to pay. The wars of the sixties in the Waikato, Taranaki, and Bay of Plenty added considerably to the area

^{*} "The Life and Times of Sir George Grey," by William Lee Rees and Lily Rees.

of Crown lands by the confiscation of the lands of the disaffected tribes. In 1873 a further bad element was introduced. Henceforth the memorial of ownership contained the individual names of every owner, man, woman and child, and all had to consent to an alienation before it would be ratified.

"Under this law," says a Royal Commission of 1891, "the alienation of native land took its very worst form and its most disastrous tendency. It was obtained from a helpless people. The crowds of owners in a memorial of ownership were like a flock of sheep without a shepherd, a watch-dog, or a leader. Mostly ignorant barbarians, they became suddenly possessed of a title to land which was a marketable commodity. . . . They were surrounded by temptations. Eager for money wherewith to buy food, clothes, and rum, they welcomed the paid agents who plied them always with cash and often with spirits. In most of the leases and purchases effected the land was obtained in large areas by capitalists. . . . Of all the purchase-money paid for the millions of acres sold by the Maori not one sixpence is left. Their remaining lands are rapidly passing away."

It was not until 1892 that the Government again resumed the pre-emptive right over the whole colony. But by this time all the baneful effects of free trade in land, both Crown and native, had accrued.

It cannot be pretended for a moment that New Zealand was in as bad a way as regards the distribution of her lands as, say, the colony of Victoria. The first established Government had been fully forewarned of the dangers of squatting, and from time to time certain very effective attempts had been made to prevent aggregation and to get the land into the hands of those who were most likely to make good use of it. The conflict of authority between the Company and the Government, and the lack of uniformity in the regulations of the different Provincial Governments, were at the root of the trouble. But probably no single incident contributed more to the defeat of the very objects that the Government was driving at

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than Sir George Grey's omission of the necessary precautions in his regulations of 1853.

Between 1868 and 1880 the area of land under cultivation (including sown grasses) increased sixfold, but the number of settlers had little more than doubled. In 1868 the average area of cultivated holdings of upwards of one acre was 65·7 acres. In 1890 it had increased to 222 acres. The trend of land development is better shown in this table :—

			Population.	Cultivation. Average Acres per Person.	No. of Sheep per Person.	No. of Cattle, Horses, &c., per Person.
1858	...	...	49,802	2·08	30·57	3·05
1867	...	...	218,668	3·09	38·49	1·73
1891	...	...	634,058	14·02	28·58	1·64

Owing to the comparatively restricted area of the country the economic difficulty before the people has always been obvious enough. To its solution successive Governments bent themselves. The task was often interrupted and complicated by more pressing problems. In the dual fear of a company or a native monopoly, the flood-gates were opened and a certain area—not much in proportion to the whole—was mopped up by a number of wealthy capitalists. Sir George Grey's regulations had been operating, more or less, for twenty years before Parliament came to a realisation of the effects and called a peremptory halt along certain lines. The Land Act of 1877, for example, prescribed 320 acres as the maximum that a purchaser on deferred payment might hold. Five years later the Whitaker Ministry fixed the square mile as the limit for one person, whether owner, tenant, or occupier. But these provisions did not apply to existing holdings, and they were neutralised by evasion and trickery. Sir George Grey was candidly appalled, when he came back to New Zealand, to ascertain how things had gone. Becoming Premier, he at once set about curing the evil by a land tax. It did, in fact, have some considerable effect in cutting up the large estates, but in an early swing of the political pendulum it was repealed.

The growing stringency of the position forced successive Governments during the eighties to certain minor expedients to bring about closer settlement. Some had a slight effect as momentary palliatives of the distress amongst the landless rural classes. Mr. Rolleston and Mr. Ballance, as Land Ministers in the Conservative and Liberal Governments respectively, each passed an Act of permanent value to the cause of closer settlement, but the eighties came to an end with many of the rural classes still condemned to a life of idleness in the towns. In 1891 the disposition of land in New Zealand was according to the following table :—

	No. of Holdings.		Total Area. Acres.
1 acre to 10,000 acres	...	43,440	10,754,707
10,000 acres and over	...	337	8,642,822
Total		43,777	19,397,529

Almost two-thirds of the total area was freehold. Two-thirds of the whole area of freehold was in possession of 2,259 individuals. At that time there were 68,600 persons, or something more than one-tenth of the population, engaged in agricultural and pastoral pursuits. There were 12,293 flocks of sheep, of which 695 numbered upwards of 5,000. One of the worst grievances of the time was the fact that upwards of one million acres was held by fifty absentee landlords. Of the 25 million acres of land still unalienated or ear-marked as reserves, the vast majority was of inferior quality, including the rugged fastnesses of the Alps and the mountain centres of the North Island. Yet New Zealand was only an infant.

It would be tedious to follow the New Zealand land laws through all the changes and vicissitudes of the last twenty years. The Government which came into office in 1891 owed its election largely to the organised opinion of the men who wanted land. Though Grey was only a private member of the House of Representatives, the Government was essentially a Grey one, and it frankly proposed to mend matters in the way that he had suggested

in a Bill which he had introduced a few years earlier. John Ballance, the leader of the party, had already some record as a land reformer. As a member of the Stout-Vogel Ministry in 1884-87 he had carried the Village Settlements Act, which had already been the means of settling a thousand families of poor men on the land. His Ministry now understood clearly the nature of its mandate. In his financial statement in 1891 Ballance said :—

“When we consider that upwards of 16 million acres of the best land has already been alienated in fee simple from the Crown, there is some reason why the remaining available estate of less than 3 million acres should be administered in the interests of the whole of the people of the colony. The time has arrived when suitable areas will have to be purchased by the Crown for small farm settlement. In many parts of the colony the Crown lands available for this purpose have already disappeared, and if the population is to be retained the wants of intending settlers will have to be met.”

Forthwith the Government repealed the property tax, and in its place imposed a tax of a penny in the pound on all land, after allowing a generous exemption of £3,000 for improvements. In addition a graduated tax was imposed, commencing at one-eighth of a penny in the pound on properties valued at £5,000 and rising to 1½d. on properties valued at over £210,000. An additional impost, again, was levied on the property of absentees. This taxation at once yielded the Ballance Government a quarter of a million sterling, and the amount derived annually now is more than half a million. Land taxation was intended at the outset to be repeatedly adjusted in such a way as to enforce the cutting up of the large estates irrespective of State resumption. The prime object of this tax was, of course, to reach land-owners in such a manner that they would be rewarded for using their land to its utmost utility. In the following year—1893—improvements were exempted entirely from taxation, and under this exemption settlers

have since expended £50,000,000 on the improvement of their holdings. The exemptions and deductions have since been so adjusted that to-day not quite one-sixth of the 174,000 persons who possessed land in New Zealand have to pay land taxes. The graduated tax has been steadily altered in its incidence so as to discourage the larger holdings and encourage the small. It commences now at one-sixteenth of a penny (one-half the original commencing figure), and at £40,000 value it is 8s. per cent., increasing thereafter to £2 per cent. on estates worth more than £200,000. An additional impost of 50 per cent. is levied on the property of absentees, who, moreover, do not enjoy the usual exemption.

Holding to the Grey principles of economy, the Ballance Government fully intended to use the land tax as the prime means of breaking up the large estates and making the land available for smaller settlers. The resumption of large estates by the State was intended to follow on the operation of the taxation measures, when the owners had been persuaded by these imposts that it would be to their advantage to subdivide. The aim of the framers, Mr. Reeves explains, was to exempt the peasant farmers and the working rural settlers and to transfer their share of the taxation to the backs of the owners of large estates. The tax was so adjusted that six-sevenths of those holding land in New Zealand had nothing whatever to pay. This extra contribution was to be compensation for the check which land monopoly gave to the progress of settlement.

Mr. Reeves thus epitomises¹ the extent to which land monopoly was carried in a colony which above all others was suited for small settlements:—

“Not half the 66 million acres of land which [the islands] contain were then settled upon even in the sparsest way. Yet 585 persons or companies owned between 10 and 11 million acres; 684 companies or persons owned or occupied real estate the unimproved

¹ “Land Taxes and Rates and Valuation of Land in New Zealand,” a memorandum prepared for the Chancellor of the Exchequer, 1909.

value of which was only a little less than £22,000,000. Two-thirds of 1 per cent. of the landowners held 40 per cent. of the land values. Putting urban land on one side, a return of rural holdings of more than five acres in extent showed that one-eightieth of the country landholders held two-fifths (in value) of the land. The price of land had fallen in 1891; some of the large owners were by no means prosperous; but pity for them did not get rid of the necessity for challenging monopoly, settling the soil, and peopling the country."

Ten years sufficed to demonstrate with fair accuracy the effect of the land taxation. Some large estates had cheerfully paid the tax, apparently with ease. There had not been so much subdivision as had been hoped. And there had been some considerable amount of subdivision which was purely evasive. "In the year 1900," remarks Mr. Reeves, "the occupied lands of the colony extended over $34\frac{1}{2}$ million acres. Of this no less than 20,665,000 acres were still held in blocks of from 5,000 acres upwards. Eight hundred and fifty-four holdings comprised more than four-sevenths of the occupied land of the country."

There had, indeed, been a considerable increase in the estates of moderate size, say from one to ten thousand acres. In 1903 the graduated tax was increased, but still the large holders weathered the storm. A prolonged prosperity made it more than ever worth their while to hold out; but at the same time it made all the more insistent the demand of the small settlers for farms.

For a few years the controversy raged about the question of freehold or leasehold for Crown lands, and then it returned to the old demand for the bursting up of the large estates. To meet this the Government of Sir Joseph Ward, which had come into office as the continuers of the Ballance and Seddon policy, passed what would appear anywhere else as a drastic and searching measure of taxation affecting estates of more than £40,000 unimproved value. At that figure the rate of the graduated tax is now 8s. per cent., and it increases

thereafter at the rate of one-fifth of a shilling for every thousand pounds of unimproved value, reaching its maximum of £2 per cent. on estates of the value of £200,000 and more.

Next year (dating from March, 1910) the invitation to subdivide the large estates will be increased by 25 per cent. What will be the effect of the new taxation remains to be seen. Its operation may possibly be complicated and confused by the fact that the price of land has within the last year or so received its first check since the original enactment of this species of taxation in 1891. It is probable, too, that the Government will now ease up on the resumption of large private estates (which has grown to unexpected dimensions), and rely upon the heavier taxation to accomplish what it was originally intended to do in making land available for small holders.

But taxation alone, though tending to burst up the large estates and make land available for the small men, would not have produced quickly enough the results aimed at. At any rate John McKenzie¹ and his colleagues were not prepared to trust for their success to half-measures, for they passed on the same day the Act which is regarded as the genesis of the new agricultural epoch of New Zealand. It was a comprehensive and sweeping measure for the settlement of Crown lands. The tendency in those days was distinctly towards the State ownership of land. No large body of farmers has yet been discovered that honestly prefers the leasehold to the freehold; but the fact that so much of the land of the colony had passed into the hands of private holders made it practically impossible for the smaller class of men ever to secure it except through the intervention of the State. The Government did not go so far as to abolish the freehold. It gave settlers the option of purchasing either for cash or on lease with right of purchase, but it made the leases so attractive that the freeholds seemed less desirable than

¹ Originally a Scotch crofter; became Minister of Lands in the Ballance Government, 1891; knighted 1901; died the same year.

during all those years when the grapes had hung so high. Under the lease-in-perpetuity the tenant had absolute security for himself and his descendants for 999 years at a rental of 4 per cent. on the cash value of the land. That is to say, the descendants of a settler who might be supposed to have taken up a section about the time when the Maori came to New Zealand, A.D. 900, would just to-day be feeling uneasy about their renewals. There is no revaluation, but the lease necessarily carries the power of sale, mortgage, sub-lease, or disposition by will. A stated amount of improvements is demanded, and the law insists upon a *bonâ-fide* residence on the section as the only means of avoiding that "dummyism" which frustrated most of the abortive remedies of the seventies and the eighties.

After a short period of head-wagging and suspicion the lease-in-perpetuity became suddenly popular. It was essentially the tenure for a man of small capital. Townsmen, men whom the price or the scarcity of land had kept on the streets, commenced to look afield. The taxation had already frightened the land monopolists, and they held off. Gradually the small men went into the back-country. Discontented townsmen formed special settlement associations, and the sons of small farmers joined in. The aggregator was definitely blotted out of the future of New Zealand by a rule restricting any man who became a Crown tenant from holding more than 640 acres of first-class or 2,000 acres of second-class land. There were mistakes, of course. Some parties of settlers, thrown down far from rail or good roads, were sheerly marooned in the wilderness. For long, patient years they had to await the arrival of the railhead or a good road to give them the full value of their produce.

But the Crown lands regulations were only half of the Government policy. At the same time a measure was passed authorising the purchase of large estates from their private owners, to be cut up into small farms. The time was scarcely ripe for this new act of "State

Socialism." For one thing, the incidence of the land taxation had not yet been felt by the owners sufficiently to cause them to part with their lands; and, secondly, the public itself was just a little sceptical. Nobody would sell to the Government. But John McKenzie was not the class of man to flinch. Opportunely it happened that the owners of the Cheviot estate, in North Canterbury, contested the valuation placed upon their property by the Government for the purposes of taxation. They contended that it was £50,000 too high, and challenged the Government to take the estate, as provided by the Land and Income Assessment Act, at their valuation. Mr. McKenzie jumped at the opportunity. Dealing with this incident in the land campaign, Mr. Pember Reeves, who was a member of the Ministry at the time, wrote:—

"It is a fine tract of 84,000 acres, on which up to 1893 some forty human beings and about 60,000 sheep were to be found. Hilly, but not mountainous, grassy, fertile, and lying against the seashore, it was exactly suited for fairly close settlement. . . . He [Mr. McKenzie] had the Cheviot bought, cut up, and opened by roads. A portion was sold, but most leased; and within a year of purchase a thriving yeomanry, numbering nearly nine hundred souls and owning 74,000 sheep, 1,500 cattle, and 500 horses, were at work in the erstwhile empty tract."

The Government valuation of the estate was £304,826, of which £54,300 was for improvements, leaving £250,526 to be taxed. The owners valued the property at £260,220, less improvements, £60,150; unimproved value, £200,070. The Government paid for the estate at the owners' valuation, viz., £260,220. Last year what was once the Cheviot estate carried 89,000 sheep throughout the winter, and sent off 40,000 for the market between November and March. There were besides 1,150 cattle, 1,000 horses, and 280 pigs. What was formerly one holding is now 320, and the rents to the State, amounting to about £15,000 a year, have already reduced by one-half the original heavy liability.

* In "The Long White Cloud," 1898.

What happened in regard to the Cheviot estate, and the General Election at the end of the year, encouraged the Government to persevere with Mr. McKenzie's programme of compulsory acquisition. It was quite evident that without this power very little progress would ever be made in the cutting up of the large estates. In the first instance Mr. McKenzie had desired the power of compulsion, but the House to which he appealed then was not nearly so Liberal—or Socialistic, as its critics delighted to designate it—as that which succeeded the General Election at the end of 1893. When he made the demand again in 1894 he was granted authority to expend not more than half a million pounds each year in the purchase of estates, either by mutual agreement or by the decision of a Compensation Court. Then the closer settlement scheme was pushed forward with energy. Estates in most of the provincial districts, with an initial preference for the South Island, were purchased and surveyed, cut up and roaded, and let as early as possible on lease-in-perpetuity at rentals equal to 5 per cent. on the cost of purchase and expenses.

Within five years 214,000 acres had been let to 1,304 selectors at a rental of £57,747. Up to March 31, 1908, the State had resumed 1,122,135 acres at a cost of £4,807,369, and had spent another half-million on surveys and roading. The rents and other revenue for the year amounted to a quarter of a million pounds, and the Land for Settlement Account showed a credit of £317,000.

Providence seemed to conspire with the Liberal Government to justify all these experiments. Season after season good and better prices ruled. The land was now in truth unlocked. Dairying, sheep-raising, wool-growing all quietly expanded. Farmers who had been for years under the thumb of the mortgagees commenced to sell their own grain and wool and mutton in the open market. By the Advances to Settlers Office, another activity of the State, high rates of interest were gradually



PLOUGHING TEAMS IN THE SOUTH ISLAND.

eliminated from agrarian economy. Farmers' sons clamoured for land. Every year more estates were bought and handed over to them ; more tracts of the brooding bush fell to the axes of the sturdy yeomanry who were willing to carve out new homes in the wilds. Backblocks pioneering became a fashionable occupation for young men from the colleges, who passed straight out to the fringe of the bush to break in the land for themselves, willing and anxious to toil for a year in the unseen fastnesses for the joy of a holiday amongst civilised men in the simmering Christmas of the Antipodes.

The settler has more than enough trouble in the first few years of his tenancy. First of all, his fences have to be erected. Many of the posts have to be "stepped" to prevent them from springing up when the strain reaches along the spurs on either side. In the early days the landslips leave chains of fencing swinging in mid-air, until the new-comer learns that it pays to run his fences along the spurs, where the ground will hold. When the summer sun has shrivelled all the felled undergrowth the "burn" comes, then the grass and stock have to be turned in carefully, enough to "hold" the country and prevent the scrub again taking possession, but not enough to eat the tender young grass out. Mustering cattle in this country is heart-breaking. The fatigue of working on the log-littered hillsides in the fierce heat of summer is excessive. It may mean half an hour's work to get a handful of cattle around one large log. If it is new country the settler often finds his cattle killed by getting jambed amongst the logs or from *tutu* poisoning. A gale of wind amongst dead trees in the first year or two is full of danger to the stock browsing beneath.

But all these troubles become gradually and beautifully less. The profits are heavy. Within a year sheep and cattle are grazing on luscious grass where the sun failed to pierce the evergreen shade of the native bush. The yeoman must exercise constant vigilance to prevent either the stock or the grass getting too much advantage.

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He must be vigilant for a dozen forms of disaster that the plainsman does not know or understand. But all the time he is making a profit. The day is ever in his vision when he will be a wealthy settler, a member of the County Council, perhaps, living the quiet life of an English squire after the strenuous days of pioneering. There is an eventide of luxury before every intelligent man who goes on the land in New Zealand. Even for the moment, while he foregoes some of the comforts of life for himself, he may send his children into the colleges, or equip them well for the secondary schools by the help of the subsidised teacher whom the State sends into the remotest fastnesses.

The chief expansion of settlement under the new land policy was in the North Island, where the State owned a larger area of unoccupied lands, and where there was always more available for purchase from the Maori. In the period of seventeen years from 1891 the holdings have shown the following astonishing increases :—

			Number of Holdings.	Freehold Acres.	Leasehold Acres.
1891	...	...	43,777	12,410,242	19,457,262
1908	...	...	73,367	16,355,138	21,209,150

The leasehold land in this table includes both Crown and private. The development of State landlordism under the present regime has not been more remarkable than it was in the uncertain period of the eighties, when the experimental systems of the opposing political parties lived side by side. The trend is shown in this table :—

				Crown Tenants.	Area Held.
1880	...	...	...	4,072	12,399,008
1890	...	...	...	10,823	13,186,716
1900	...	...	...	14,400	14,889,412
1908	...	...	...	20,168	17,082,134

The action of the closer settlement provisions, too, was very decisive. Between 1889 and 1906 the area of freehold land held in areas of upwards of 10,000 acres

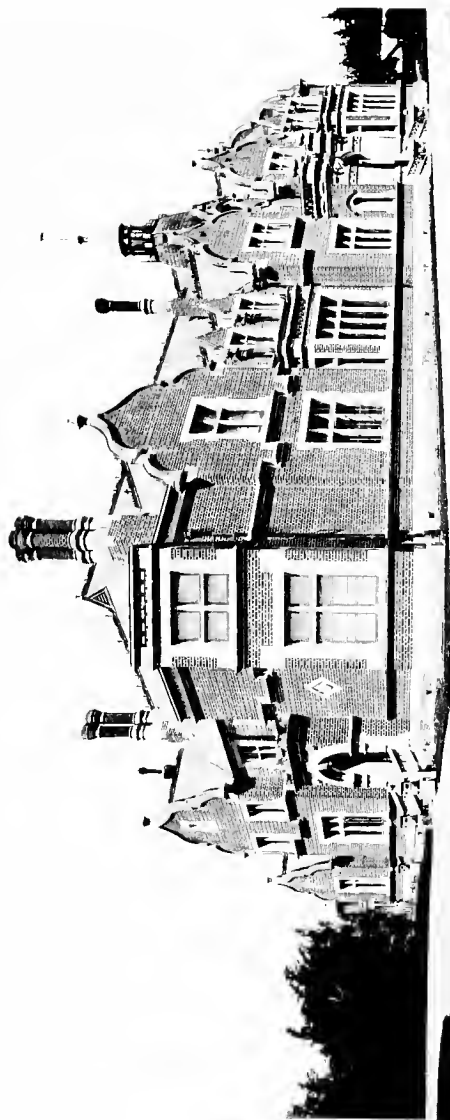
was reduced by 2,797,000 acres. Government purchases were, of course, largely responsible for this, but fully one-third of the reduction was the result of voluntary subdivision by owners to escape the graduated taxation. In 1891 the average size of a holding (both freehold and leasehold) was 728 acres, in 1908 it was 512 acres. But we find a more cogent comparison still in the size of the flocks and volume of produce :—

	1891.	1908.	Increase per Cent.
Land in occupation ...	31,867,504 acres	37,564,288 acres	17·87
Occupiers ...	43,777	73,367	67·59
Flock owners ...	12,293	(1907) 19,977	62·50
Number of sheep ...	18,128,286	(1907) 20,983,772	15·75
Number of cattle ...	831,831	(1907) 1,816,299	118·34
Export of wool ...	101,187,114 lb.	162,518,481	60·61
Export of dairy produce	79,200 cwt.	510,769	544·91
Export of frozen meat, &c. ...	1,000,307 cwt.	2,110,765	111·01
Agricultural population	68,607	(1906) 97,930	42·74

In drawing conclusions from this remarkable expansion of production, one must not presume too far upon the effect of the land laws. The fortuitous sequence of events which in two succeeding decades gave to New Zealand the means of transporting perishable foodstuffs to the other side of the world, and a continued run of good prices for produce, must not be overlooked. Irrespective of any economic reforms, either in land or industry, these circumstances would have remedied to a great extent the disastrous condition of affairs which followed the depression of the eighties. At the same time it is fair to presume that this very prosperity would have locked up the lands of the colony more firmly than ever in the hands of the freeholders of 1891, had the Government not armed itself with the powers of taxation and compulsory acquisition. Further, it is questionable whether the remaining Crown lands would ever have come into the hands of the right class of yeoman farmers if the conditions of settlement had not been made so easy and the limitation of area enforced.

As it is, men began to think by the end of the century that John McKenzie and his colleagues had been rather too generous to the new tenants, who were already in the majority of cases well-to-do and even wealthy farmers. In the sempiternal dispute about tenures, which again at the dawn of the twentieth century dominated the politics of New Zealand, it was realised with full force that the legislation of 1822, designed to assist the poorer class of men to take up land, had actually constituted them a privileged aristocracy. The lessees-in-perpetuity had a title equal to the freehold except for the solitary purpose of mortgaging—though it could be mortgaged. They had a title which will endure through the centuries, until, and perhaps after, the time when New Zealand shall have become the controlling power of the Pacific. They had land actually cheaper than freehold. They were guaranteed against revaluation and so enjoyed absolute fixity of rental, and all the improvements made in the soil by cultivation, &c., were secured to them. The bogey of single tax, towards which the landowners feared the Seddon Government was leaning, gave the State leaseholds an additional value in the eyes of the lessees. The lessees-in-perpetuity, now numbering 11,000, and holding about 2,300,000 acres of land (including all the resumed estates up to 1907), were universally envied. Whichever way the cat jumped they stood secure. There was never any question of an assault upon existing contracts.

By this time old-age pensions had become a permanent charge on the public revenues, and it was freely demanded that not another acre of Crown lands should be parted with until a due endowment had been made to meet this charge. As a matter of fact the balance of Crown lands was inconsiderable, and the rents could never have provided more than a fraction of the sum required for old-age pensions. The controversy was even more keen than that of the early nineties. Legislation brought it to a solution in 1907 and 1908, when the lease-in-perpetuity was abolished and supplanted by



AGRICULTURAL COLLEGE AT LINCOLN, CANTERBURY.

a sixty-six years' lease with right of renewal for the same period at rents to be determined by revaluation. In the case of resumed lands the term of lease (which is also renewable) is thirty-three years, and the rent is at $4\frac{1}{2}$ per cent. of the cost instead of 5 per cent. as in the case of the old leases. In each case the lessee may pay off up to 90 per cent. of the capital value of the land, so as to lighten the burden of his rents in the future, but the principle of State landlordism is conserved in the remaining tenth.

As a result of this controversy it is now again definitely affirmed that lands repurchased by the State for closer settlement shall never again be granted in fee simple. According to the present feeling of Parliament and the country the State must never part with the freehold of land so acquired. But the freehold tenure is not by any means abolished. Both Crown and private lands can still be so acquired. In 1907 the Hon. R. McNab, who was responsible for the legislation just outlined, secured the permanent reservation of nine million acres of leasehold land as an endowment for education and old-age pensions.

It may be that time will show defects again in the land system of New Zealand. It depends upon the future of State landlordism and the temper of posterity towards single tax whether the disabilities of the ordinary lessees and even of the freeholders will be aggravated as compared with the lessees-in-perpetuity. Almost certainly, still further provision will be required for the closer settlement of the land. For the moment, however, the land system embodies the best thought-out code in the British Empire for the occupation and working of the land to its fullest utility. Ever since 1882 there has been a steady movement towards closer settlement. Smaller farms and more of them : smaller flocks and more of them : smaller subdivision and more people. Seventy-nine per cent. of the New Zealand farms to-day are not more than 320 acres in extent, yet the private wealth of a million people is more than £350,000,000.

New Zealand has furnished the model for many of the land laws of sister States. It has been copied in its most radical moods by States which have been confronted with the same problems. To-day it is being imitated by the Mother Country of the Empire. But the best testimony to the good faith of its purpose and the efficiency of its operation is the general approval of both parties in politics, the rapid increase of primary production, and the overwhelming fact that in New Zealand farming is regarded as a fit and proper occupation for men of birth and education.

The healthy economic condition of New Zealand is disclosed in some measure by the distribution of the population. Just one-fourth of the whole population is centred in the four chief cities, the largest of which, including its most remote suburbs (which are almost rural) contained at the last census (1906) 82,000 people. Besides these cities there are only two towns with upwards of ten thousand inhabitants, and the total population included in towns of more than two thousand inhabitants is only 380,000, or about 42 per cent. of the population of the Dominion. The balance is therefore strictly rural, and engaged for the most part in connection with the primary industries.

CHAPTER XIV

THE ORGANISATION OF LABOUR

Labour conditions in 1890—Sweating and bad conditions—The beginning of trades unionism—The voice of Labour—Emissaries from abroad—The worldwide federation—The maritime strike—Death of worldwide organisation—The Government objects to State "interference" in industrial relations—Entry of Labour into politics—The Liberal and Labour alliance—Victory at the polls—The programme of reforms—Report of the Sweating Commission—The Labour Department—The unemployed—Co-operative labour—State farms—Recovery from the depression—Seddon succeeds John Ballance—Another mandate from the people—The Industrial Arbitration Act—The battle for compulsion.

LET us revert to the industrial position as it stood at the end of the eighties. It is easy to be concise as to certain small facts, for we have the copious report of the Sweating Commission to guide us.

We know, for example, that almost every trade was overrun with boys, girls, and women, and the case of the adult efficient man was a very uncertain one. In half a dozen saddlers' shops which the Commission inquired into it found 83 boys, 3 girls, and 27 men; in another 7 boys and no men. A tailoring establishment employed 7 girls, 1 man, and 3 boys; a fibre company 90 boys and 12 men; a newspaper, 5 men and 45 boys; a cabinet-maker, 4 men and 20 boys. A most important branch of engineering, agricultural implement-making, showed 60 per cent. of boys in one shop and 50 per cent. in another. The Government railways workshops themselves offended, but mildly in the spirit of the times.

Then as to wages, first-class machinists in the tailoring trade earned 20s. a week. Girls worked excessive hours

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to earn from 10s. to 12s. a week, a wage which the log recently introduced by the organisation of the trade would have given them in eight hours. They worked twelve months for no salary and then invariably had to make way for more *volontaires*. Drill trousers at 2s. 6d. a dozen yielded 7s. or 8s. a week of eighteen-hour days. Girls machining trousers at 2½d. a pair could not amass more than 1s. 3d. a day. The best week's pay of a female shirtmaker was 10s. 6d. A girl working from 8 a.m. to 5 p.m. on buttonholes at 6d. a dozen could make the exceptional wages of 15s. a week. Slop vests at 8d. each yielded 2s. 8d. a day to the diligent worker. Calico bag-makers received 1s. 6d. per gross, while the 7-lb. bag had been reduced from 6s. to 4s. the gross. Men who were earning £3 10s. a week in 1874 were now unable to get more than £1 15s. Cabinet-makers on piece-work earned 30s. a week. A baker, for £1 5s. a week and found, had to work from 108 to 112 hours. Boys in the saddlery trade averaged 7s. 6d. for a week of 50 hours. Girls in restaurants worked from eight in the morning till eleven at night.

In given-out work, the nominal maker received 7s. a dozen for shirts, the actual maker 5s. With prices ranging from 6s. 6d. to 9s. 6d. a dozen, the middlemen took upwards of 30 per cent. for themselves.

The conditions of work, too, were the vilest outcome of the lack of regulation. In one case, for example, seven women were found working in a small room 12 feet by 8 feet by 8 feet fitted up in a cellar, and five in an adjoining room of similar dimensions. The whole air-space was sufficient for only three adults. To avoid such inspection as there was, numbers of girls in one establishment had to work on the roof after hours. Seven boy saddlers worked in a room 14 feet by 12 feet. Fourteen young girls were busy hand-sewing in a room 21 feet by 11 feet by 8½ feet, where they had less than one-fourth of the proper air-space. Not even lunch-rooms were provided, and males and females alike had to go on to the streets or into the often insanitary "yards" to eat

their lunch. Employers were utterly reckless as to whether the girls could live on their wages. They had to make the best of it. Engineering languished almost unto death when the boom times ceased. Quite unprotected, it had no work beyond the usual local repairs, and the output shrank. One firm discharged a third of its hands in two months. In another shop the output fell from £70,000 to £20,000 in four years. All steam-engines, boilers, and bridges were imported.

The evils which existed at that time were, of course, primarily due to the terrible depression under which the colony had laboured for the last ten years. But their intensity was plainly the result of the absolute lack of any regulation. At the end of the eighties everything was at the lowest conceivable ebb, but there was at length a ray of light in an articulate public opinion ready to agitate for reform. When an Act was passed in 1878 providing for registration of trades unions the workers of New Zealand were still enjoying some measure of the Vogel prosperity, and they did not register. For ten years they suffered and learned their lesson.

When the Sweating Commission was appointed labour was beginning to express itself. By the time its report was published it was a power in the land. Under social pressure as it was felt during the eighties men began to think. Trades began slowly to organise—very slowly. The first appreciable move was in 1889. Very slowly, too, organisation showed material evidence of profit to the workers themselves. The Tailoresses' Union improved the position of tailoresses throughout the colony before the workers generally had realised the possibilities of organisation. The great dock strike on the other side of the world emphasised the argument. Trades unionism became suddenly popular and universal. There was a feeling of fellowship amongst the workers of all trades, a union in the face of common adversity that made the worker of New Zealand for the first time in history a power to be reckoned with. With educated leaders they might have done much without the assist-

ance of any established political party. With it they were destined to achieve more than their most sanguine advocates had expected. The year 1890 was pregnant with importance. In a single period of twelve months the Labour Party received what might have been a crushing blow to their hopes, and finally achieved an overpowering victory.

Up to this point the organisation of labour had sprung largely from the older industrial countries. The industrial system of Australasia was crude and elementary. Labour had never been organised, and it was only beginning to understand what organisation meant by a study of the great events that were happening in the Old World. The eighties were dark days for labour in England and America, and the organisations there strove hard to win to their side the sympathy and support of labour the world over. Great English organisations, such as the Amalgamated Society of Carpenters and Joiners, American, as the Knights of Labour, sent their delegates to the new countries to organise a worldwide federation. They came opportunely to Australasia, and for awhile the workers of the new countries, unversed themselves in the principles and methods of co-operation, gave their support and their funds to the worldwide organisations. The Knights of Labour were particularly energetic and fostered to a great degree the feeling of the universal brotherhood of labour. Under its teaching trades unionism in New Zealand was but a subsidiary activity of the great labour federation of the world. Some trades in the colony transmitted thousands of pounds oversea to the headquarters of the federations. What this might have led to we cannot conjecture. Fortunately an event occurred in 1890 which cleared the air and brought the labour organisations in New Zealand to their bearings.

The maritime strike, which broke out in August of that year, was in reality the turning-point of trades unionism in New Zealand. In this dispute the workers of New Zealand had no direct interest. They had no wish to strike in sympathy with the workers of New South Wales,

and they only did so because their teaching had been on the lines just indicated. They honestly felt that to have withheld their sympathy at this moment would have been to strike a vital blow at labour co-operation in its very infancy. The unionists held out against the employment of free labour. The Union Steamship Company of New Zealand, which was in no sense a partner to the dispute, stood firm, and finally the unionists had to submit. The employers had won a victory, but they had established, for the ultimate benefit of labour, the unassailable principle that if labour was to do anything by organisation it must confine itself to its own affairs and decline to "go out" in sympathy with disputes in which New Zealand was not concerned.

It is impossible to conjecture how the strike would have ended if there had not been abundance of free labour. In the ultimate result it could not have ended more fortunately for labour in New Zealand. To have encouraged the worldwide ideal would undoubtedly have retarded social reform and involved the country in countless strikes having no local bearing whatever. At this point the oversea federation of labour fell away. But the Knights of Labour did not succumb. In the years that followed they took an active and useful part in the great work of distributing the people on the land, and there are several blocks of small farms in the newly settled country of New Zealand bearing their name.

While these stirring events were passing in the open organised labour was quietly gaining recognition of a vital principle. In the same month in which the maritime strike occurred the Grey Valley Coal Company, one of the pioneer companies engaged in opening up the valuable coal deposits on the West Coast, had a rupture with its employees.¹ The miners appealed to the

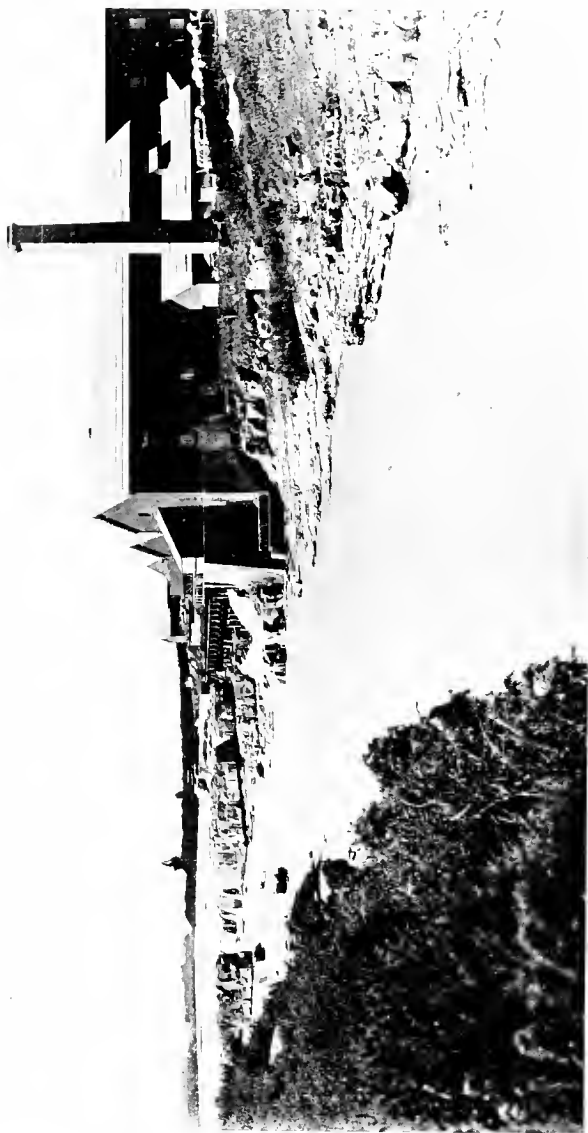
¹ The Company had made a change in its mode and rate of payment, but finding on trial that it entailed an increased expenditure of £250 a week, it resolved to revert to the old system. The royalties paid by the Company on the coal raised were applied to the improvement by the Government of the coal ports of Greymouth and Westport.

Government to grant them relief by reducing the royalty and railway freights. The reply of the Government—the Conservatives were then in power—was that it would require fuller information before it could ask Parliament to act, and if a Commission were appointed to investigate the difficulty it “would certainly amongst other things have to inquire into the amount of wages earned by the miners, as well as the profits made by the Company and the rates of freight paid by land and sea,” &c. The Government added that it had no intention of interfering between the Company and the miners and only proposed to make the inquiries since it was asked to grant concessions out of the public funds. The miners replied with indignation :—

“If the Commission was appointed to inquire into the question of wages we shall most decidedly object to the Government interfering between us and our employers on these matters. At the same time we have not the slightest objection to the fullest inquiry that may be arranged between us and the Grey Valley Coal Co., such inquiry to be based on the rate of wages paid to the coal-miners on the West Coast.”

Within a few days of these letters passing the representatives of organised labour in Wellington, the capital city, requested the Government to interfere and put a stop to the maritime strike. Again Sir Harry Atkinson declined to be the inaugurator of State mediation in industrial relations. The Liberal party, whose alliance with labour was already recognised as a political force, then carried a direct resolution in the House of Representatives, and the Government, thus requisitioned, arranged a series of conferences. A bootless interference it proved, for the Company declined to submit to a demand which was obviously subversive of the decent rights of employers, and the men had finally to capitulate unconditionally.

Chastened and profitably educated by this rebuff, labour set to work to foster its alliance with the Liberal party in politics. It is quite certain, as before stated,



PAPER MILLS AT MATAURA, SOUTHLAND.

that the trades unions were now strong enough to be a very disturbing—in fact, a controlling—power in the politics of New Zealand. If the reformers had gone to the polls as an independent political party, they would probably have met with some considerable measure of success, and, holding the balance of power between the two political parties, have exacted from Parliament some ameliorating measures. They might have achieved a Factories Act, they might have had the employment of apprentices and boys restricted, but they could never have placed on the Statute Book legislation embodying the system of compulsory arbitration in industrial disputes.

The best friends of the workers recognised their limitations. They saw that the independent entry of labour into politics must delay indefinitely the most pressing reforms, and finally achieve them, if at all, piecemeal and feebly. They saw the dangers and the abuses that must follow if the whole power of trades unionism were exerted directly through Parliament to adjust and trim industrial relations without the introduction of any comprehensive scheme based on sound economic principles. On the other hand, they saw that the Liberal party in Parliament, with the accession of support which labour could now give them at the polls, would probably be in a position to achieve something immediate, to cope with the existing abuses strongly and on systematic lines, and to make such an adjustment as would in all human probability outlive the urgent needs of the moment. To understand the position we cannot do better than turn to the admirable chapter on the era by one of its most prominent actors, the Hon. W. Pember Reeves. He says¹:—

“The coming of organised labour into politics in the

¹ “State Experiments in Australia and New Zealand.” Mr. Reeves was a member of the Ballance Government which came into office in 1891, and as Minister for Labour he was personally responsible for most of the industrial laws of the next five years. He was appointed Agent-General for New Zealand in 1896 and High Commissioner in 1905. The last post he resigned in 1908 to become Director of the London School of Economics.

years between 1890 and 1893 did not mean merely that workpeople were bestirring themselves to obtain certain reforms. Half its significance and force sprang from its being a new departure in the matter of men as well as measures. . . . The rapid growth of trades unions in the eighties had taught colonial labour the strength of organisation. The success of the German Socialists at the polls and the declaration in England in favour of an independent labour movement were heard of in the colonies. The wave of Socialistic feeling swept over them. In 1889 every one was reading Collectivist tracts and listening to altruistic sermons. Trades unionists were not by any means the only colonists to send money home to help the London dockers. And when the dockers won their strike middle-class men and women in Australia and New Zealand rejoiced as over a victory for the cause of humanity. Philanthropists and politicians joined in exposing the beginnings of sweating in the clothing and other trades in certain of the larger towns, and newspapers owned by capitalists lent their help in the good work."

Even in the colonies there is a faint tendency to discuss purely economic questions from the political standpoint. The colonial constituency, intelligent and educated as a rule, cannot quite dissociate adverse social conditions, bad seasons, droughts, and low prices from the Government which happens to be in power at the time. Rebuffed in the maritime strike, the labour unions had time to review their position before the election at the end of the year. With or without the report of the Sweating Commission they understood something of the value of organisation. Unions were formed in all trades and all over the country. And they were not merely trades unions in the ordinary sense of the word. The leaders were not to be led away by false hopes of achieving much either by strictly non-political activity or by playing a lone hand in politics. They were willing to entrust their hopes to the Liberal party, the party of John Ballance, as the inheritors of the attractive Liberal pro-

gramme of Sir George Grey. Ballance had already a modest record of achievements on behalf of the working class and the landless. His party had pressed the Conservative Government at every turn during the last ten years and had taken up a position of frank friendliness to labour during the maritime strike. The alliance was a natural one. To labour it was a matter of life and death. In its interest every trades union became an electioneering committee. Labour nominated some candidates from its own ranks. Where it failed to do so the Liberal candidate subscribed to the labour platform. So that when the elections removed the Conservative party from office Ballance succeeded with the support of a party pledged to carry through sweeping reforms in the interests of the working class.

The time and the feeling of the time were alike propitious for the reforms that had to be made. In its social and economic conditions New Zealand was so emaciated, its prosperity so reduced, that great changes might be brought about without great upheaval. Men had been leaving the country in great numbers—and that was significant when the nearest place to which they could fly for relief was 1,200 miles away. Public opinion, too, even of a large class who were not directly associated with the workers, was earnestly looking for some regulation of industry which would prevent a perpetuation of the scandals exposed by the Sweating Commission, and for some reformation of social life which would reduce the distress on account of unemployment. Soup kitchens—in fact, unemployment and want in any degree—seemed to the thinking classes an incongruous and disreputable thing in a country bursting with the richness of its undeveloped natural resources.

Ballance, the experienced reformer, had both the courage and the confidence to act. And he wasted no time. It was no eleventh-hour decision of the Liberal party to use the regulation of industries and the closer settlement of the land as twin measures of relief. For a long time the opposing political parties had been firm in their

attitudes towards State "interference" with industry. For a decade they had been arrayed against each other on the land question, and in the system as it existed when the Liberal party took office were valuable survivals of the policy of each. Ballance had a most elaborate land scheme ready to be put into force, and, as explained elsewhere, Parliament in its first session made preliminary provision for carrying it out.

Meanwhile the social evil was assailed with all the vigour of a young and hopeful party. The Sweating Commission, with evidence before it closely describing the conditions already stated, could not definitely declare that sweating had secured a footing in New Zealand. What it said was that "the system known in London and elsewhere as sweating, and which seemed at one time likely to obtain a footing in some of the New Zealand cities, does not exist." A minority, rather sceptical, declared that sweating and sub-letting did exist and would have to be suppressed without delay. In its general report the Commission simply bore out what was already well known. The Act regulating the employment of females was practically a dead letter. Uneducated boys taken from school too young were working in factories without any attempt at concealment and with no regulation of hours. And for the same reason, viz., that inspectors were not sufficiently equipped with authority, the conditions of work were utterly insanitary. Long hours were often worked unnecessarily, and there was a great demand both amongst assistants and shopkeepers for some regulation of shop hours.

The division of labour and the use of machinery, the Commission found, had been largely responsible for the employment of such a proportion of boys and girls. Under the new conditions the skill of the worker did not require to be so high or so comprehensive in character, and it was inevitable that those engaged in manufacturing should employ the cheapest labour. The chief grievance amongst the artisans was the exclusion of skilled workers for the benefit of boys. Where trades

unions had been formed the proportion of boys to men had been strictly defined "with the avowed intention of keeping up the supply of workers, but really for self-preservation." The system of indenturing had fallen into disuse, with the result that young people who had received some amount of training had to go elsewhere to find work, and frequently ended either by accepting poor wages or by entering into business on their own account. With regard to trades unionism the evidence went to show that in whatever branch of industry a union had been formed there had been an improvement in the condition of the operatives, wages did not sink below a living minimum, and the hours of work were not excessive. The Commission recommended, amongst minor reforms—

1. That all factories should be registered.

2. That no boy or girl under fourteen should be allowed to work in them, and that none between fourteen and eighteen should be allowed to work more than forty-eight hours a week.

3. That all goods manufactured for sale should bear the trade mark.

The reforms were taken in instalments. By the Truck Act it was made illegal, regardless of the existence of any contra account, to pay wages in goods or "truck." The Employers' Liability Act was amended to protect workmen from the negligence of employers, and it incidentally absolutely forbade the system of "contracting out," of which the Sweating Commission had learned so much.¹

For the moment the smaller evils disclosed by the

¹ The Fair Wages Committee appointed by the Imperial Treasury to investigate certain aspects of industrial life, in its report last year, made the following reference to the same evil in England: "When a special price is fixed between the employer and the sub-contractor, and there is a suspicion that the latter pays his subordinates according to no fixed rule and is, in fact, making a profit out of their labour rather than merely earning wages by his own labour, then the system leads to complaint on the part of the workpeople. It is difficult to draw the line between this and absolute sweating."

report of the Commission were provided for by the establishment of a Department of Labour, charged with the dual duty of factory inspection and "feeding" the surplus supply of labour to the needs of the market. The instructions received from the Government by the head of the Department were :—

1. To compile statistics concerning the condition of labour.

2. To establish agencies for reporting the scarcity or overplus of workers in different localities.

3. To transfer workers from overcrowded localities to places needing labour ; and generally to control all industries for the physical and moral benefit of those engaged therein.

The great difficulty which the Department had first to cope with was the decentralisation of the masses of unemployed who had congregated in the larger towns. Many of them, by long idleness, had become more or less inefficient at their own trades. Others had never had a trade. They were facetiously called "unskilled" workers—a term which has now been taken to include "skilled" navvies—and were as likely to be good farm hands as good general labourers. The Department commenced immediately to draft these men to the country districts, meeting any local demand for labour. The inauguration of the co-operative system in the construction of both railways and roads (which is dealt with in another chapter) soon absorbed a considerable number of the drifters, who under this system were able to earn from the State the wages they were worthy of. To every single avenue of employment, moreover, the Government added the attractive possibility of securing a piece of land. For the selection of the co-operative labourers, for example, the State provided, in villages near their work, small farms of ten to fifteen acres as an inducement to the men to make their homes in the country instead of drifting back to the towns when their work was finished. In the first year of its existence the Department of Labour drafted out to employment 2,974 of the unemployed who

had congregated in the towns. From its inception in 1891 to 1908 the Department in this phase of its activity has assisted 58,000 men, with 93,000 persons dependent on them. Nearly two-thirds of the total were found employment on Government works, *i.e.*, the construction of railways, roads, and bridges.

Within the next year or two State farms were commenced with a view to teaching some of the unemployed the rudiments of agriculture and drafting them thence to agricultural life. The first of these was commenced on a piece of bush land of 800 acres within forty miles of Wellington, and there for some years the State gave work and instruction to a few score of men whose wives and children resided with them and who subsisted on their earnings. It did not pay, of course : it was never intended to. On the other hand, the margin of loss diminished very rapidly, and the farm served its purpose to a limited extent. As one of its best advocates remarked :—

“A State farm should not be looked at from a profit-and-loss point of view, but rather as an institution the establishment of which is demanded by the exigencies of our social life, and which, like other public institutions, reimburses the State by increasing the sum of general well-being.”

As unemployment diminished the aspect of the farm was altered, and to-day it has a wider utility as an experimental station. A Select Committee in 1898 recommended certain reforms in the system, the establishment of allied industries (dairying, jam-making, poultry-raising, &c.), but the State has not yet felt justified in entering into these activities.

For the moment the reforms attempted were simply palliatives. And as such they were eminently satisfactory. Year by year the unsettled population decreased in numbers. Year by year discontented and penurious town dwellers passed out to the land. Year by year the movement of population recovered until the balance was restored in favour of immigration. Many of the root

evils were as yet unassailed, but the steady and systematic feeding of labour to the demand and the gradual adjustment of population had such an effect that during an ensuing period of commercial depression, with no great expenditure of loan money on public works, the industrial fabric of the colony was able to absorb 10,000 new-comers and the 15,000 children who annually passed out of the State schools. The tariff passed in 1888 was beginning to have a beneficial effect on some industries, and the body politic began to show signs of restored health before the Government went to the country in 1893.

John Ballance had died during the year, and the Premiership had fallen to his lieutenant, Richard John Seddon, like him a disciple of the veteran Grey. Seddon was gifted with all the courage, all the pertinacity of his predecessor. He was, moreover, more vigorously enthusiastic and endowed with a robust constitution and manner which served the cause well during the next few years. The Government had now some achievement to point to. It had justified its policy in the eyes of the people by an unquestioned amelioration of the distress which prevailed when it took office. And it was now once again armed with a new and powerful political weapon, the female franchise.¹ It came back to office with a following which proved that the people, at all events, approved of the policy measures which had been attempted in the past Parliament. This election meant that the country favoured the long-debated principle of State "interference" in industry, and that it was not averse to that bogey of State Socialism which took the form of land resumption. The reform policy of the Liberal party proceeded along parallel lines in respect to land on the one hand and to industrial relations on the

¹ The election of 1890 was the first under the one-man-one-vote principle. Previously electors could vote in each electorate in which they held property. This was one of Sir George Grey's reforms. The female franchise, which was granted in 1893, was strongly supported by an old Conservative leader, Sir John Hall. At present the franchise extends to every person upwards of twenty-one years of age.

other, and the country had, apparently, approved the whole programme.

It was not enough that the Government had taken power in 1892 to acquire private lands for closer settlement, for nobody would sell. John McKenzie had to return to the attack and secure at the point of the bayonet the power of compulsory purchase. It was not enough that Mr. Reeves had obtained in 1891 a law giving some powers of supervision and regulation of unscrupulous employers. This measure did not reach the unscrupulous, and it did not provide as much of the necessary policing of industry as then existed in England. He wished to go much farther, to deal with the subject comprehensively, but year after year he had been baulked by the Opposition in his attempts to pass a Bill providing for industrial arbitration. But the session of 1894, the first of the new Parliament, was distinctly propitious, and the measure at length passed through both Houses.

In spite of the great growth of Liberal prestige the victory was by no means uncontested. So far as the principle of State "interference" between master and man was concerned, the allied parties had been almost unanimous since the days of the great maritime strike, now four years ago. On the absolute condition of its severance from the trammels of any worldwide federation, trades unionism was now to be given an accession of dignity. Mr. Reeves was convinced that the organisation of labour, and if possible of capital, was an essential precedent to the introduction of any reasonable form of arbitration. He could not conceive the possibility, or indeed the necessity, of controlling or binding independent individual workers by the award in a specific case, or "dispute," as it was to be called.

"The exclusion of disputes between individuals," he wrote, "or between unorganised workmen and their masters, is grounded on the belief that such disputes are apt to be neither stubborn nor mischievous enough to call for State interference ; moreover, how could an award

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be enforced against a handful of roving workmen, a mere nebulous cluster of units?"

The whole intent of the legislation was to remove labour disputes from the plane of strikes and outrage and dislocation of industry to a calm judicial atmosphere where they could be discussed dispassionately and settled by equitable compromise. It was essential that as the mass of the workers would enjoy the benefits of the Act, there should be some organised executive to represent them and, if necessary, to assume their penalties and responsibilities. Therefore the trades union, as a corporate body possessed of funds, he treated as the unit on the side of the workers.

But the whole fierceness of the battle raged about the element of compulsion. In this, as in the land legislation, the Government held that without the compulsory power the Act would be a dead letter. And the temper of the times was full justification for their fears since, as we shall see later, the employers, even under compulsory arbitration, held aloof and refused to co-operate. The Government stood firm, and the Bill was eventually passed substantially as drafted.

To describe its frank intention to conciliate if possible, and if not, then to arbitrate and lay down the law, the Act was called "The Industrial Conciliation and Arbitration Act." If the workers in an industry, having organised, desired higher wages, shorter hours, or other improved conditions—in fact, if they had any wishes that were not already provided hard and fast in the Factories Act or elsewhere—they filed with the Conciliation Board¹ for the district a declaration stating their requirements. It was the duty of the Board to investigate the case, calling evidence, compelling attendance, and exercising all the powers necessary to come

¹ The boards, of which there was one for each industrial district, consisted of such unequal number of members as the Governor-in-Council might think fit, but not more than five. Each side elected an even number of representatives, and these together elected "some impartial person" as chairman.

to a decision. It then filed a recommendation—a compromise as a rule—and if both parties accepted it, well and good: it governed the industry in that district for the period for which it was made.

But if both parties, or either, rejected the settlement, the case was taken to the Arbitration Court, where it was investigated *de novo*. In the original scheme this body was intended to be a court of final appeal, whose decision should be law. The Court consists of a judge of the Supreme Court as permanent resident, associated with one representative of the employers and one of the workers, each appointed for three years.

The passing of the Arbitration Act and the establishment of its tribunals marked the triumph of the struggles of organised labour in New Zealand. The problem of the future was administration. The sympathy of the employers had to be, and was, secured, and the history of arbitration from this point became an interesting study in the swinging of the industrial pendulum and the careful adjustment of the balance between capital and labour.

Strange to say, the bitterest and most protracted fight of all was not over the Arbitration Act, but over the passing of an Act to regulate the hours of shop-assistants and the closing of shops. So many small and large interests were affected that the opposition had no difficulty in instituting a vigorous campaign from end to end of the country. Feeling ran higher than on the land question, and when victory was achieved after a five years' controversy it was regarded as a triumph essential to the completeness of the labour policy. There are still a few exempted trades, but generally speaking, the shops are all subject to regulation, the holidays being based upon majority recommendations of the shopkeepers in each locality.

CHAPTER XV

SOME EFFECTS OF ARBITRATION

Delight of the workers—The employers hostile—Awards favour the workers—Steady increase of wages—A wave of prosperity—The dual alliance, Arbitration and Protection—A sacrifice for local employment—Dependence upon primary industries—Immunity from arbitration—The colonial worker—Efficient and conscientious—The “levelling tendency” a fallacy—The under-rate workman—A “loafing” incident—The elimination of apprentices—The shortage of workers—Room for efficient artisans—Improvement of female conditions—Home-work, &c.—The expansion of industry—Hostile critics won over—Security for capital.

By the workers the new Act was hailed with a pæan of delight. They had admittedly still much to obtain before the balance was at all evenly adjusted between them and their employers.

The employers, on the other hand, treated the new courts with open hostility as an overt assault upon their interests. Their attitude, though unfortunate, was not to be wondered at. The Liberal party during the last twenty years had made a series of disastrous attacks upon the dominancy of capital, upon what most countries regard as the sacred rights of property. They had received, if they had not earned, the title of “The Seven Devils of Socialism,” and they were now advancing with resolute determination on a policy which was utterly repugnant to their opponents. It was generally expected, in view of the disclosures of the Sweating Commission, that for a time at least most of the concessions of the new tribunals would go in favour of labour. For what in the event occurred the employers themselves were to some extent responsible. For some years, in the vain hope

that a political upheaval might lead to the repeal of the legislation, they held aloof from the advantages which it offered them. The Government was honest in its determination to swing the scales evenly between the two sides—to safeguard capital while it protected labour—but it could only do so with the co-operation of both sides.

For years, as they foresaw must be the case, employers were penalised and labour benefited. There was so much leeway to be made good that the decisions of the boards and the courts were apparently all one-sided. The unions revelled in it. Some secretaries became professional agitators, living on salaries which were likely to be paid the less grudgingly if the unions prevailed in the courts. Capital still held sullenly aloof and protested. The employers in some cases refused to nominate their representatives to the boards, and the Government had to fill the vacancies. Steadily wages were increased in all trades. From 1896 to 1906, as illustrated in the calculations of the Registrar-General, they rose as follows :—

					£	s.	d.
Average wage for 27,389 persons,	1896	...			69	12	11
" " 49,806 "	1906	...			82	7	9
Increase ... 18 per cent.					<hr/>		
Average male wage,	1896	...			77	5	10
" " 1906	...	...			88	4	7
Increase ... 13 per cent.					<hr/>		
Average female wage,	1896	...			29	17	5
" " 1906	...	...			41	13	11
Increase ... 39 per cent.					<hr/>		

Although the great bulk of this increase was granted by the courts, it is not to be supposed that without these bodies the wages bill would not have increased. Prosperity conspired with Mr. Pember Reeves and his successor (Mr. Seddon) to tide the employers over their difficulties. Orders poured in : more men were employed : there were no strikes. Industries gradually

came to a level on a satisfactory basis, and the employers found that it was not so bad after all. In any case such a tide of prosperity, under the rules of supply and demand, would have given the workers a general increase of pay, though possibly not to the extent of the 28 per cent. by which the actual increase exceeded the growth of employment itself.

At this time everything conspired to increase the cost of living. The insatiety of the world-markets for wool, meat, and dairy produce, and the excellent quality of New Zealand's output in these lines, had the dual effect of enhancing the price in the home market and increasing the value of land. The latter circumstance in turn helped to increase rents both in country and town, and so, day after day, a concatenation of reasons was adduced before the Arbitration Court and the boards why the minimum wage of the workers in practically all industries should be increased. (As a matter of fact, the cost of living in all parts of the world, including Free Trade England, increased during the early years of the present century.) And the minimum wage was increased on every demand. In ten years of the Act's existence there was only a single decision by the Court reducing wages, and there were only two extending the hours of work. This steady jumping of wages and subsidiary expenses resulted in a continuous increase in the cost of production, and a continued transference of the added cost to the consumer, who was generally the worker himself, until the tariff-wall had to be raised to protect the product against the competition of cheaply produced foreign articles.

It is impossible to separate the operation of Protection from any consideration of the working of the industrial laws of New Zealand. At the first onset the Act justified the hopes of the workers and the fears of the employers by increasing wages all round. Unions which had not felt any particular grounds for dissatisfaction before the Act came into force now suddenly discovered grievances. Occasionally they were grievances flagrantly manufac-

tured for the specific purpose of obtaining higher wages, but in other cases they accrued honestly with the increased cost of living—an increase which sometimes could not be definitely attributed either to the operation of the arbitration laws or to the effect of Protection. The “living wage”—a sweetly indefinite tidal mark—was steadily rising. Mr. Reeves was quite truthful when he wrote in 1898:—

“It is wrong to suppose that the operation of the Act is confined to industries protected by high customs duties or to workers in factories.”

But the employers soon discovered that in the temper of the day they had simply to pass the increased cost of production on to the consumer. Of course, it appeared again, with the accuracy of a well-thrown boomerang, in the increased cost of commodities and the higher rents upon which a further increase would presently be demanded. This could not continue for any length of time with unprotected industries—and incidentally the unprotected industries, most of which were primary, were left outside the operation of the Act for a very long time. But it did happen over and over again in protected industries, the cost rising steadily until it reached the margin of danger in competition, when the tariff was invoked to raise the wall higher and make the *enclave* secure again for local manufactures. This has actually happened, not once or twice, within the last few years, with the full concurrence of Parliament and people, and with only a few hesitant voices to call it vicious.

This development is a striking evidence of the feeling of the day. Mindful of the terrible depression of the eighties, New Zealanders are at present quite willing to pay higher than Free Trade prices for the sake of protecting their own industries from foreign competition, and they console themselves with the reflection that the cost of living, except, perhaps, for the low-class worker who is a feature of the English industrial towns, is cheaper in New Zealand than in England, and much cheaper than

in America. On the other hand, they are forbidden to look forward very hopefully to the growth of their industries beyond the needs of the home market. Unless some great trade depression intervenes and the price of land falls headlong—the last thing to be desired—the cost of production and of living must apparently continue to rise, and the time must come when the tariff barriers cannot possibly be raised higher. At the same time, the product of New Zealand industries has not yet nearly reached the limit imposed by the home market, and possibly by the time it does the population will have so increased as to enable the cost of production to be considerably lowered by specialising. In the meantime all increases in the cost of production, whether caused in a perfectly legitimate manner by the action of the industrial courts, or in a questionable manner by manipulation of the tariff, must be recouped from the people of New Zealand. An English investigator remarks:—¹

“In an exceptional degree New Zealand is economically self-contained, in the sense of being able, owing to its great wealth and relatively small population, and to its geographical and commercial isolation, to regulate conditions over a wide field by legislative enactments. . . . Wage-earners form the bulk of the population, and thus of consumers. If, therefore, prices rise disproportionately to increase in wages, to whom, it is asked, do the advantages accrue?”

The manufacturing industries of New Zealand arose out of a desire to find employment for the artisans of the colony at a time when primary production had outgrown the necessities of the accessible markets. In those days there was a modified form of Protection, so little that it would have been impossible to establish industries at all if New Zealand had not been geographically protected by a wide sea-moat. But the sea, while it still affords some protection against oversea competition in the home market, serves to complete an absolute barrier

¹ Mr. Ernest Aves, who was appointed by the Board of Trade to investigate the industrial laws of Australia and New Zealand, 1907-8.

against the invasion of foreign markets by New Zealand manufacturers. By the time that high wages have been paid in the Dominion, and heavy freights by sea, the New Zealand manufactured product cannot as yet live in any oversea market side by side with the output of the cheaper European centres.

As a matter of fact, New Zealand depends for her prosperity even more to-day than before the industrial era upon her exports of primary products. The comparison is as follows:—

		Value of Total Exports.	N.Z. Manufactures (Included).	Proportion of Manu- factures to Total.
		£	£	
1892	...	9,196,885	153,135	1·66 per cent.
1907	...	19,783,138	241,634	1·22 per cent.

And the primary industries have been generally beyond the pale of the labour laws. There was no specific reservation to this effect in the Acts themselves, but the Court has discretion to refuse to make an award if it considers it advisable to do so, and it is still regarded as improper, or at least precarious, to make restrictions as to wages, &c., in an industry the product of which is subject to the fluctuations of a market on the other side of the world. This objection does not, of course, conform to the spirit of the legislation, but it seemed to have general approval until the quite recent organisation of the farm labourers. This approval of the principle had already survived the making of awards to govern shearing, mustering, flax-milling, &c. It was not until the Act had been thirteen years in force that its application to agricultural industries generally became imminent, and then the Court (in 1908) declined to make an award on the ground that such regulation of the work of farm labourers was both unnecessary and difficult of enforcement.

It is a frequent jibe of the opponents of industrial arbitration that it has destroyed the independence and efficiency of the worker and transformed him into a shirking malcontent. At half of this indictment the New Zealander can well afford to laugh: at the other half,

possibly, he may shrug his shoulders. The colonial worker, both in Australia and New Zealand, is not only more intelligent than his English brother, but he is out of comparison a more willing and energetic worker. The eight-hour day in the Antipodes is eight hours of strenuous labour. It is very rare to find works overmanned. Adequate wages are paid to a sufficient number of men to meet the requirements of the business by working energetically and at full power during the statutory day. There is no encouragement to work overtime. For the employers it means payment at increased rates: for the men a loss of that leisure for recreation and rest which is essential to continued efficiency. As a consequence the work in a colonial factory or engineering shop, while it lasts, is energetic, thorough, and efficient. The everyday complaint of artisans from the Old Country emigrating to the colonies is that the work is too hard: that they require all the residue from an eight-hours labour day to recuperate for the morrow. The colonial worker, too, is eminently sober.

The fixing of wages and hours of work by a legal authority has certainly had some of the "levelling tendency" which was predicted, but the minimum wage is not by any means the maximum, as casual observers are prone to believe. There is quite enough competition in industry to insure that good men will receive recognition irrespective of the scale fixed by the courts, and there is scarcely a factory in New Zealand to-day whose pay-roll would not disclose a respectable number of employees who are receiving more than the rate of pay prescribed in the award.¹ It is in respect to inefficient or under-rate workmen that the levelling-down tendency is most apparent, and for this the unions themselves are largely responsible. Fearing that the operation of the

¹ The secretary of the Wellington Furniture Trades Union, writing to the Press in March, 1909, says: "The wages part of the award is really a dead letter between the employers and the Union, for the reason that the employers pay, in many cases, considerably over the minimum."

under-rate regulations might lead to the employment of a large proportion of men at wages below the minimum prescribed by the award, they opposed the issue of permits to this class of men. This has tended to throw out of employment altogether men who, though not capable of earning 10s. a day, might quite well have earned 7s. or 8s., and supported themselves and their dependents. This innocent little section of the Act might have had almost disastrous social consequences in constantly reducing the age at which men could continue to do efficient work if Parliament had not finally placed the power of issuing permits in the hands of the officials of the Department. Even under the present conditions the pressure of the unions is likely to be continuously exerted to restrict the number of permits issued, and thus throw inefficient workers and old men out of employment when they could still earn reduced wages. This would be a distinct defeat of one of the humane principles of the original Act.

Any statement that the efficiency of the worker is not undermined by the arbitration law is likely to be challenged by the more casual observer, and especially by those who, in a short sojourn in the Dominion, have naturally fallen more into confidential relations with employers than with the employed. Mr. E. Aves, for example, whose thoughtful report has been quoted at an earlier stage, remarks :—

“Failure to reach this reasonable standard of efficiency is, however, constantly mentioned, and although it is difficult to prove and measure, I think the evidence is conclusive that present conditions in New Zealand are tending, so far as adult male workers are concerned, and over a wide field, towards a lower efficiency.”

A peculiar incident, which might give colour to this belief, occurred at the beginning of the present year. The General Manager of Railways, in a departmental letter (which was not intended to become public), complained of idling and inefficient work at the railway workshops at Addington, where much of the rolling

stock and many locomotives are constructed. He remarked in his letter that a private firm in the Dominion was able to construct locomotives more cheaply than the Government shops, which are excellently equipped. A Royal Commission was appointed to investigate the charges of "loafing," but when the inquiry had proceeded for some days the charges, which had not received much substantiation, were withdrawn.

One respect in which the Arbitration Act has struck on Charybdis in avoiding Scylla is the training of apprentices. The conditions obtaining when the industrial revolution took place, and fully described by the Sweating Commission, utterly prejudiced the future of the apprentice and the boy worker. Though it was not made illegal, in the first instance, to employ young people without payment, the operation of the arbitration law gradually eliminated the unpaid worker. Many firms still found it an economy to employ a large proportion of apprentices, who were equally competent with journeymen long before they were entitled to journeymen's wages. The boards and courts had, however, the power to fix the number of apprentices in the different trades which came before them, and the unions naturally, from motives of self-preservation, invariably threw their weight in to restrict the number, just as they had opposed the granting of under-rate permits. The tribunals did what they could against the representations of the unions. In a judgment in 1902, in a grocers' dispute, the Court remarked :—

"There are some occupations where it is advisable to limit the youths in number. But there are other occupations where no such limit is either reasonable or necessary ; and it is our duty to see that the avenues for suitable work are not closed to the youth of the colony. We owe a duty to the boys of the community, as well as to the adult workers of the colony, and that duty we must perform to the best of our ability."

Before the law had been ten years in operation industries were beginning to feel the ill-effects of the restric-



COLONIAL AMMUNITION COMPANY'S WORKS AT AUCKLAND.

tion of apprentices. Debarred admission to the industries, and frequently encouraged to "look higher" by parents whose sudden accession of prosperity begot ambition, youngsters drifted steadily into mercantile offices, banks, and even—by the medium of a cheap and excellent education—into the professions. The standard of living and of education in New Zealand to-day is probably higher than in any other country in the world. All branches of engineering are regarded as suitable occupations for men of breeding and education, and farming is quite fashionable for young men of college and university education. Under these circumstances, and in face of the restriction of apprentices, most of the lower trades have been starved. New Zealand youths have been deprived of admission, and a chronic shortage of workers has been created. New Zealand has thus for years offered almost certain prospects for efficient and intelligent artisans from oversea, and very few answering the description have returned disappointed. At the same time, the immigration of men has been quite inadequate to fill the vacancies in industries, chiefly because the workers of the Dominion, misled by false and selfish economic ideas, have always opposed tooth and nail any movement on the part of the Government to encourage men of their own class to come to the country. In this respect protection has been carried *ad absurdum*, and the industries of the Dominion are feeling the effects.

Apart from this difficulty, New Zealand is to-day faced with a considerable shortage of workers on account of the greatly diminished rate of natural increase. Economic reasons which are partially evident from a perusal of these chapters were probably responsible in great measure for reducing the birth-rate from 37·32 to 27·83 per 1,000 in the ten years of depression, 1882–92. These figures, too, are striking :—

	White Population.	No of Births.	Rate per 1,000.
1882...	... 509,309	19,009	37·32
1907...	... 919,105	25,094	27·30

There has, indeed, been a steady increase of late from the low level of 1899 (when the rate was 25·12), but the natural increase of to-day will not be felt in mitigation of the shortage for fifteen years, and the Secretary for Labour¹ has given it as his opinion that New Zealand industries must be handicapped severely for this reason. In the report of the Department for 1908 Mr. Tregear says :—

“I have already alluded to the complaints made by employers as to their business enterprise being cramped through the paucity of hands to do the work. This shortage is denied by the representatives of labour, who say that, if the statement is true at all, it depicts a mere temporary difficulty, and that to introduce workers from abroad would merely be assisting employers to flood the market with surplus labour in order to lower wages. . . . If we take the case of girls of suitable age to work in factories, we find that in New Zealand, between the years 1891 and 1896, there was an increase of 21·62 per cent. in the number of girls between fifteen and twenty-one years of age. In the next five years the increase had fallen to 6·77 per cent., and in the five years ending 1906 to 1·26 per cent. In regard to still younger girls the further want of reserve power for our labour supply is apparent.”

The figures with regard to boys are much the same, and Mr. Tregear remarks :—

“Such figures, as the result of twenty years’ national growth, are absolutely startling to those who have to take prevision for the welfare of the people generally. The difficulty may not be evaded or shirked. Either our industries, instead of expanding, must shrink and disappear, or workers to carry on those industries must be found. That there are few and fewer recruits available

¹ Mr. Edward Tregear, F.R.G.S., F.R. Hist. S., a native of Southampton; arrived in New Zealand in 1863, and served through the Maori wars, for which he received the medal. Became Secretary of the Bureau of Industries in 1891, and of the Department of Labour 1893. Was Chairman of the Royal Commission on Private Benefit Societies in 1897, and of that on the Kauri Gum Industry in the following year.

from among the children of the Dominion will appear certain as time goes on, and even if there could be a remarkable filling-up of the cradles from this moment onwards, it would still take years to close the present vacant spaces in the thin ranks of our children who are now between five and fifteen years of age."

In spite of the determined opposition of the labour organisations, various employers, more particularly in the clothing and boot trades, have resorted to the expedient of importing operatives from the industrial centres of England, Scotland, and Ireland. There are certain trades in New Zealand at the present time in which an efficient and intelligent worker, emigrating from England, will never want for work.

The industrial legislation has worked wonders in the condition of the female worker. For them trades unionism did something, as in the case of the tailoresses, but arbitration did infinitely more. In every case of female labour that came before the Court a minimum wage was fixed, and the effect has been to place female labour on a footing immeasurably superior to that of the pre-arbitration days, and indirectly to disarm women as the industrial competitors of men, except in unorganised occupations, such as mercantile clerks. The levelling up of the status of the female worker has quite done away with the under-cutting of male labour.¹ The following figures for certain classified trades show the proportion of females employed and the improvement in their wages :—

¹ On this evil, as it exists in England, the Fair Wages Committee appointed by the Lords of the Treasury reported in 1908 : "The competition of female labour is viewed with alarm in certain trades by representatives of the men, but we do not see any ground on which the Government can, on general principles, restrict the employment of women on work which they can do efficiently . . . The really important factors would appear, generally speaking, to be the unorganised condition of women's labour, and the fact that in many cases the woman is quite willing to accept a lower rate of wages than a man, owing to the smaller claims upon her and the support she may receive from her relatives."

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Proportion of females to total				1896.		1906.	
workers	16.70	per cent.	20.25	per cent.
Ditto cheese and butter-making				4.86	"	1.89	"
Ditto printing	...	...	...	9.70	"	16.93	"
Ditto biscuit-making	...	...	...	18.82	"	35.43	"
Average wages				£29 17s. 5d.		£41 13s. 11d.	

It was in 1899 that an Act was passed fixing a universal minimum wage, and under this every boy and girl under eighteen had to receive not less than 5s. and 4s. a week respectively, irrespective of overtime. A new Factory Act two years later made the minimum rate for workers under eighteen 5s. a week, with an annual increment of not less than 3s. weekly until reaching the age of twenty.

Home-work, the root of much sweating, was dealt a heavy blow in the first Factory Act, which made it compulsory that articles made in private dwellings or unregistered workshops should be so labelled when exposed for sale, so as to handicap them in competition with articles made in properly conducted factories. It received its final blow in the Act of 1901, which makes it absolutely illegal to give out or sublet. Work must be done in his own factory and by his own employees by the person to whom the contract is given. And the effect, to quote Mr. Aves again, is that "the home worker is hardly a factor, much less a problem, in New Zealand."

But while all these subsidiary forces and ramifications of the Act were at work, the legislation was also producing other very distinct results. In spite of all the criticism that has been hurled at the arbitration law the results of its operation utterly refute the statement that it is inimical to industry. Even if we allow to the fullest for the unprecedented prosperity which the Dominion enjoyed throughout the period following the great depression, we are almost forced to the conclusion that the labour legislation has actually added to the benefits which the community has received. The following table,

illustrating the expansion of industries for the decade 1896-1906 is graphic enough :—

		1896.	1906.	Increase per Cent.
Population (white) ...	...	714,162	908,726	27
Factory workers ...	...	27,389	56,359	105
Wages paid (1895) ...	...	£1,907,592	£4,457,619	133
Value of manufactures ...	...	£9,549,360	£23,444,235	145
Exports ...	...	£9,177,336	£17,840,346	94

If we carry the comparison down to the year 1908, the figures are even more decisive. The increase of factory workers, for example, amounted to 142 per cent., and of wages to 177 per cent., while the exports expanded to the extent of 118 per cent. But the greatest benefit of all—and the one the workers are most liable to overlook—is the sound increase of employment. At the beginning of the period probably one-fourth of the workers were unemployed. To-day it is a mere fraction.¹

After making the fullest consideration for the great natural prosperity of the period, these figures demonstrate clearly that the industrial legislation has not fulfilled the lugubrious predictions of its early enemies, that it would strangle industry. The liabilities of an employer in respect to his workmen are such that the employment figures may be regarded as quite a reliable indication of the growth of industries. For the rest, the value of the manufactures may be modified by the fact that much of it is the increased wages transmitted to the consumer. In the exports, on the other hand, this is not so. Their value is based on the ruling prices in oversea markets which are far beyond the pale of the New Zealand labour laws. Incidentally the prices of some of the principal foodstuffs—meat, butter, cheese, and milk—have increased in response to the improved oversea markets, and so justified to some extent the demands of the workers for higher wages.

If there is any truth in the statement that the history

¹ At the census of 1906 only 2·53 of the breadwinners of New Zealand were out of work.

of the last fifteen years in New Zealand has tended to frighten capitalists by reason of the restrictions applied to industries, there is also much to reassure them in the protection afforded against unfair competition, the freedom from strike dislocations, and the unlimited purchasing powers of the people. The market must for years be a local one, but as such it is probably unsurpassed in the world. A recent commercial investigator,¹ touching on this point, says :—

“A distinctly erroneous impression exists amongst manufacturers and capitalists in Great Britain concerning labour conditions in Australasia. . . . Capitalists need have no fear of labour in Australasia. When one appreciates local circumstances, the apparent extraordinary legislation no longer appears unreasonable : indeed, some of the largest employers say that they prefer running factories in a country where wages and hours of working are regulated in a measure by the State.

“It is beyond question that the effect of this legislation has been to obviate serious strikes. What statistics are available show clearly that, both in Australia and New Zealand, a fewer number of working hours are lost on account of labour disputes than in any other industrial country which might reasonably be compared with it.”

Elsewhere the same writer says :—

“If the terms of these Acts and their working in practice were better known I believe that a large measure of confidence would be restored. Locally State regulation of industry has actually given a feeling of security and permanency to industry, consequent on its having rendered serious strikes impossible ; and if the true state of affairs were more clearly realised in Great Britain, there would, in my opinion, be much more British capital invested in Australasian industries than there is at the present time.”

And during all these long years of controversy, too, another, and a more valuable, result was steadily being

¹ Mr. Ben H. Morgan, Special Commissioner in Australasia for the Manufacturers' Association of Great Britain, 1908.

achieved. The hostility of the employers had for the first few years threatened the very existence of the legislation. In the face of firm and impartial administration it gradually diminished, and in ten years the principle of industrial arbitration was practically rooted in the soil of New Zealand. An English business man, who visited New Zealand in the former period and again in the latter,¹ says :—

“Experience has taught the business man wisdom. The honest employer has found himself freed from the unfair competition of the sweater and the mushroom trader, and he is able to depend mainly on his brains for success. Wages being uniform, competition has been fairer.”

¹ Mr. Percy A. Harris, B.A., in “New Zealand and its Politics,” 1909.

CHAPTER XVI

DISCONTENT AMONGST THE WORKERS

Malpractice of the Conciliation Boards—Payment of members—Professional agitators—The boards superseded—Bitter party feeling—Avarice of the landlords—Mr. Tregear's memorandum—Revolt of the workers against the courts—Recrimination and abuse—"A rude economic lesson"—Proposed Labour Parliament—Talking about strikes—Outbreak of slaughtermen—Arbitration in danger—Loyalty of the public—Strikers fined—Labour irreconcilable—Auckland tramways strike—Punishment of coal-miners—A note of warning—Anti-strike clause in an award—An amending Act—Back to the fountain-head—Conciliation Boards restored—Legal procedure eliminated—Punishment of strikers.

THE Act had not been long in force before it was quite evident that the Court would not be regarded as entirely a court of appeal, to be resorted to on rare occasions. One of the strongest arguments against the Privy Council appeal from the courts of law of the Dominion is the fact that unless the cost of proceedings is prohibitive, the dissatisfied party will rarely accept an adverse decision while there is a further tribunal to appeal to.

At first the Conciliation Boards had some little success in conciliation. But only at first. "Recommendations" generally took the form of a compromise, and it soon became rare for the parties to accept the recommendation. Even if they were quite satisfactory there were obvious reasons why professional advocates should dislike to see disputes too readily terminated. And so dispute after dispute was carried on to the Court. Union after union came forward with new demands, and the boards, continually failing to bring about a settlement, had to send

the cases on to the congested Court for decision. The spirit of conciliation was quite destroyed by the intrusion of the special pleaders into cases quite outside the pale of their own or kindred trades. The acrimonies and haggling before the boards became proverbial. There was soon no room for doubt that frivolous and trivial cases were being brought by the unions in confidence that if they asked much they would at least get a little.

To make matters worse, Parliament decided in 1896 that the members of Conciliation Boards should receive a fee of a guinea per day while they were engaged in the hearing of disputes. The author of the Act had set his face sternly against any such payments, in the belief that they would encourage the fomenting of strife and that, at best, they were inimical to the whole principle of conciliation. When the original Bill went to the Legislative Council for approval that body quietly slipped in a clause providing for the payment of members of boards, but the Government, on Mr. Reeves's urgent representations, insisted upon its removal. Now Mr. Reeves was out of the colony—he had gone to London as Agent-general—and Parliament, probably unwittingly, inflicted a serious injury upon the boards. Most of the members of the boards were men of some social standing, but there were not wanting unscrupulous characters, and before long it was an open secret that the "conciliators" themselves were actually trumping up so-called "disputes" for the sake of earning fees at the hearing of them. Parliament cannot be absolved from the reproach of having failed to remedy this flagrant abuse. Within three years of the passing of the Act it was evident that the boards were a failure. Mr. Reeves himself was candid enough to admit that they were not essential, but he did not expect to see them so flagrantly abused, apparently with the sanction of Parliament.

Year after year disputes which were not infrequently of a questionable nature were fostered and brought forward, and thousands of pounds were wasted in hearing

them twice over. In very rare cases did the boards achieve a settlement. In no case in which the Board failed did its work materially assist the Court at the subsequent hearing. At last, in 1901, Parliament assailed the scandal. Almost while nobody was looking a clause was slipped into an amending Bill giving power to take disputes direct to the Court without hearing by the Board. It was the natural sequence of what had gone before. It was the death-knell of the Conciliation Boards. There were, of course, individual cases in which the boards were successful, chiefly where a better class of men happened to be members ; but the best friend of conciliation cannot pretend for a moment that the system, as it was treated by the employers and by the workers, had justified itself.

The whole system of arbitration was as yet experimental. The Government could not point to it, as to the land laws, and say, "*Si requiris monumentum circumspice!*" On the other hand, bitter controversy still surrounded the experiment, and the Liberal Government guarded jealously each limb of the system for fear that the loss of a part might lead to the overthrow of the whole. Had it not been for this fear there is no doubt that the Government, in fairness to the original framer of the Act, would have taken steps sooner.

Shortly after the beginning of the new century it became apparent that the arbitration laws had given to the workers as much of the material advantages as they could hope for. The flagrant wrongs of ten years earlier had long since been redressed. Wages had been raised to the proportion of a fair tax on profits. Henceforth, it was apparent, concessions would come more slowly. The industrial conditions in New Zealand were the best in the world. Labour had achieved more than it dared desire ten years ago.

Now, unfortunately for himself, the worker fell into the hands of evil counsellors. That wise provision of the Act which forbade the appearance of lawyers in the hearing of cases before the boards had given rise to a crop of

something much worse for the relationships of labour and capital than educated legal advocates. The professional union secretary developed into the most bitter and withal ignorant pleader. Some of the unions, under the advice of these men, became insatiable and unreasonable in their demands. They would never leave well alone. The professional organiser became quite a feature of the labour world, and the same men who "organised" certain trades into unions appeared in the courts presently to earn fees as their advocates in disputes.

The Court naturally hesitated to grant increases which the condition of the trade did not seem to justify, and labour became discontented and maligned the Court. But irrespective of this sort of manipulation by professional agitators, the men were impelled by certain definite forces over which they had no control. The cost of living had increased out of proportion to the increase of wages. There were certain prosperities in which the workers did not participate, a "malignant collateral action," which threatened to neutralise the whole good work of the Act. As the principal official guardian of the labour laws, Mr. Tregear wrote to the Prime Minister in 1904, drawing attention to it in these words :—

"The general effect of the Act has been to benefit the whole community by ensuring to the employer stability of business and output : to the worker higher wages and shorter hours : to the general public that continuity of trade and output which was formerly too often dislocated by the mischievous waste of strike and lock-out. . . . Of course the rise in wages given by the Arbitration Court to certain classes of workers is asserted by some to be a reason for the increased cost of articles and services, but this argument runs in a vicious circle, for it is the increased cost of necessities which has caused the concession of higher wages. There has been no fair ratio between the rise in wages and the rise in prices. The fact is that there is a third hand in the game besides the employer and the employee, and it is this third man—the non-producing ground landlord of the city and suburban

property—who alone will rise the winner in the end. The chief devourer of the wages of the worker and of the profits of the employer is excessive rent. That an equitable payment for the use of land and dwellings should be made to their owners is, under the present constitution of society, proper and desirable, but a greedy, rack-renting system which transfers gradually almost the whole of the earnings of the industrial and commercial classes into the pockets of the non-producer is indefensible.”¹

It was the pressure of high rents, reflected in the price of all commodities and services, that impelled the workers to persist in demands which were apparently avaricious and unjustifiable. An elaborate calculation by the Registrar-General of New Zealand shows that wages increased at the rate of 23 per cent. in the thirteen years 1895–1907. The price of provisions, computed on the bare necessities of life, increased in the same period by 22 per cent. No calculation has yet been made as to clothes and rent. The Court stood firm, yielding where it thought right, but generally declining to make concessions to the workers to recoup them the penalties of a species of prosperity in which the industries were not participators. It placed the welfare of the industry itself first. In a judgment at Auckland in 1901 the Court remarked :—

“This Court, in our opinion, is not justified in increasing the rate of wages so as to destroy, or in a great measure cripple, an industry upon which many workers now depend for their livelihood and in which many individuals have invested money. We are satisfied that the mining industry, as a whole, in the Hauraki mining district, is in a very critical condition, and that the Court is not justified, unless very cogent reasons are established, in adding to the present expense necessary for the further development of the industry.”

It was at this point—a varying one according to the

¹ As the outcome of the report here quoted the Government undertook the experiment of building homes for the workers, as described elsewhere.

particular trade affected—that the revolt of the workers against the Act commenced. Their loyalty cooled as soon as the decisions of the Court ceased to give them the material benefits they had become accustomed to. Recrimination and abuse succeeded to the triumphant cocksureness of the previous period. One after another the Supreme Court judges who had acted as president of the Court became tired of the unaccustomed experience of having their judgments traversed and their motives criticised, and asked to be removed to the more legal and certainly more dignified atmosphere of the Supreme Court Bench. Unable to understand the causes of the increased cost of living, the workers clamoured for further reprisals upon their employers. When this was refused they fell out with the Act and all its workings. The State was asked to intervene and operate certain industries in the interests of the public. But the State was already doing all that it cared to in this direction. The Government was composed of eminently sensible men who realised that what was sauce for the goose must be sauce for the gander. It had supported the Act when it was used to redress the grievances of the worker against the unscrupulous capitalist, and it must now support it in justice to the honest capitalist. The employers had not yet become quite reconciled to the principle of arbitration, but they stood by the Act now because it was their innings. The workers were bitterly disappointed. To quote Mr. Harris again :—¹

“After fourteen years’ arbitration the workers find that, apart from hours and conditions of labour, they are, in material comforts, little better off. They have had a rude economic lesson in the difference between money and real wages. This lies at the bottom of the general discontent.”

Irresponsible delegates at the labour conferences talked of repealing the Act and reverting to the old methods of settling disputes. The strike and the lock-out, unheard of for fourteen years, suddenly became objects of affec-

¹ “New Zealand and its Politics,” 1909.

tion and admiration, for the loss of which the Act was reviled. As an example of the irresponsible talk that was prevalent, one labour body passed a resolution calling on the Government to remove the duties from imported boots, since the local industry had been unable to give the workers decent conditions.¹ As a matter of fact, before arbitration was introduced, the boot operatives were working under worse conditions almost than the employees in any other trade.

Even before the revolt of the workers became acute the Government realised that the Act in its practice savoured too much of the hard technicality of the law, and not sufficiently of the amenities of conciliation, by personal discussion between the parties. This was emphasised when direct recourse to the Court practically blotted the boards out of existence. Mr. Seddon, in 1905, foresaw what would happen, and endeavoured to forestall it by convening what he called a Labour Parliament, at which representatives of the workers, the employers, and the farmers should meet to discuss the relations of master and man, and endeavour to get a general recognition of certain essential principles of conciliation. Again the employers held aloof and refused to be represented. They had loyally complied with the requirements of the Arbitration Act when it penalised themselves, and they hesitated to do anything now that might be construed as evidence that they were willing to see it repealed out of existence. Their attitude now was an insistence that it should be preserved to protect them against the aggressiveness of the worker. The Parliament was consequently abandoned, and the position left to develop.

Before long the simmering dissatisfaction of the workers took definite form. They had been talking about strikes as a possible weapon for some years. Now they openly discussed the penal clauses of the Act, and easily enough found holes in them. Month by month they were more

¹ Boot factories in New Zealand employ about 2,500 hands and pay £180,000 yearly in wages. The output is valued at half a million sterling.

ready to find fault with the Court, and to seize upon pretexts for breaking into open revolt.

When they did revolt eventually, in the beginning of 1907, it was without the unction of a pretext. The slaughtermen at the freezing works near Wellington, who were largely nomads from Australia migrating to the passage of the seasons, were working under an award which had expired, but which held valid automatically until replaced by a fresh one. The work of the Court was rather congested, and the men, fearing delay in having their case heard, presented an ultimatum direct to the companies, demanding an increase of wages. The employers rejected the demands as irregular, and stated their willingness to have the dispute heard by the Court in the customary manner. The retort of the men was an immediate cessation of work—the first considerable strike in New Zealand for fourteen years. The moment that strike took place the whole fabric of arbitration in New Zealand was in jeopardy. All that preserved it was a healthy public opinion.

To all classes, including the more thoughtful section of the workers, the very idea of a reversion to the old system of settling industrial disputes was utterly repugnant. Opinions differed, of course, as to how far the operation of the Act should extend, but scarcely a single association of employers or union of workers honestly disagreed with the basic principle of arbitration as against the arbitraments of force.

“One and all had agreed,” writes Mr. Harris, “that the principle of arbitration must be maintained, and none wish to go back to the time of the settlement of disputes by strikes. The only difference of opinion is as to how to make the law press equally on employer and employee.”

Mr. Ernest Aves, too, by a set of questions put in 1907, ascertained that less than one-fifth of the employers he had consulted believed that the Act was disadvantageous; thirty-five out of forty-three were in favour of it. Forty-five out of forty-eight employees admitted it was advan-

tageous to themselves. There was a general concensus of opinion on both sides that it had improved the conditions of work.

In the slaughtermen's dispute the defiance of the workers was rank mutiny. They simply declined to have their case heard by the tribunal whose decision they were legally bound to obey. The ringleaders were arraigned before the Court for enforcement of the terms of their agreement, which held valid until it should be replaced by a new one. They escaped on a technical imperfection in the original document. All over the country the slaughtermen struck. At Gisborne their strike consisted in killing at only a fraction of their usual rate. They were fined £5 each, and the lesson was emphasised by a decision of the Appeal Court that the offenders could be imprisoned in default of payment. But while these and many subsequent proceedings were passing, the very existence of the Act was based on public opinion. If the temper of the public had in the slightest degree encouraged the workers in their defiance of institutions which had given to them all that was worth having in their social conditions, the whole fabric of arbitration would have crumbled to pieces.

As a matter of fact the workers were thoroughly and irreconcilably dissatisfied with their condition at the moment. Every month their grievances were aggravated. Long before the end of 1907 they had thrown to the winds the last shred of their respect for the Arbitration Act, the Court and the members themselves. The old reign of recrimination returned. The delays caused by the congestion of work were the main complaint.

"But," said one studied manifesto, "it is not administration alone with which we are dissatisfied, but the constitution of the Court, also. We have been taught that the arbitration judge is infallible and all-powerful. In our recent dispute regarding the bank-to-bank question, we wished to appeal against the judge's unjust decision, and were informed that the decision of the Arbitration Court was final and binding. Now we have

the matter in a nutshell. The arbitration judge is infallible and all-powerful, and I think his administration proves beyond doubt that he is not impartial."

This was everyday language in 1907 and 1908. Revolt was in the air. Even a staid conference of farmers, enraged possibly by the action of a conciliation board in calling four hundred witnesses, and incurring £3,000 in expenses in investigating a farm labourers' dispute,¹ called upon the Government, "in view of the failure of the Act to prevent strikes, and the unfair and weak manner in which it was administered," to repeal it. The tramway employees in the city of Auckland went on strike for the second time in six months, and a special board of conciliation—the first ever invoked under the original Act—was finally set up to deal with the case. In its settlement this Board introduced a new and much debated clause, compelling the Tramway Company in the case of future dismissals of employees to give "valid reasons" for the step.

The next incident in the story of revolt was the strike of the Blackball coal-miners because the Company would not reinstate some men who had been dismissed in connection with a former trouble. This became the crucial strike of the period. The pretext of the strikers was indefensibly weak, it is true, but that made all the more significant the sympathetic action of kindred unions throughout the Dominion. Short of personal violence all the old-time strike methods were adopted. Trades councils passed resolutions of sympathy. Unions everywhere in the Dominion voted funds and encouraged the men to remain out when they had not the faintest justification for doing so. If the men's cause had been a

¹ When the Board's recommendations in this case were presented, a minority report was attached, objecting to the whole case on the grounds that—(1) The evidence showed conclusively that there was not, and never had been, any real dispute between the farmers and genuine farm workers; (2) that no trouble had arisen until a few men employed in trades in the cities had visited the farming centres as "organisers"; (3) that the weight of evidence was overwhelmingly against the wisdom of making an award applicable to the industry.

good one, the Act would almost certainly have been wrecked, but this was markedly an incident in which general dissatisfaction and a determination to "break something" completely warped such judgment as the labour leaders had already shown in the crisis. Public sympathy was entirely alienated, and the whole country applauded the decision of the Arbitration Court fining the miners' union £75 for its misdemeanour.

In the course of its judgment (March 13, 1908) the Court said :—

"It appears from the evidence that several trades and labour councils, and also some workers' unions in the Dominion, have passed resolutions expressing their approval of the present strike. Now, the whole purpose of the conciliation and arbitration system is to prevent strikes, and it is clear that strikes and arbitration cannot exist together as remedies for the settlement of industrial disputes. The workers of the Dominion must make up their minds which of these remedies they desire to see retained. They cannot have both, and they must elect which they will support. If they are satisfied that it would be better for them to have the arbitration system abolished, and the right of striking restored in its integrity, there would be little difficulty, we think, in persuading employers to concur with the workers in asking the Legislature to bring about the change, and the employers would assist, no doubt, with becoming cheerfulness, in performing the obsequies of the system. If however, the workers desire to retain the present system of arbitration, either with or without modification, then they ought to realise that every resolution that is passed approving of a strike furnishes an argument for the abolition of the system. An arbitration system which does not prevent strikes is a failure, and cannot survive. If the workers, by striking and approving of strikes, bring about the destruction of the arbitration system, they may have occasion in future to deplore, when too late, the sad want of foresight shown by their leaders."

The Blackball Miners' Union defied the judgment of

the Court, and an order was then made to recover the sum payable from certain individual miners. When this, too, was defied, the Government proceeded to distrain on the goods and chattels of the judgment debtors. The miners still remained obdurate, and treated the sale as a joke, the whole of the articles being disposed of for 12s. 6d. Still the men refused to return to work, and the Government had to admit that it had no power to proceed against them as if their refusal constituted the offence a recurring one. The triumph of the men in this respect was a barren one—it was not even a moral victory. After being “out” for eleven weeks they accepted conditions which spelt defeat, and returned to duty disgusted and chastened in their hostility to the Act.

Yet another strike—that of bakers in the city of Wellington—emphasised the continued revolt of the workers. The men simply refused to accept an award of the Court and went out. Again the unions sympathised and the public disapproved. Again the men had to yield.

It was now no longer possible to dally with the position. The public was becoming impatient. It, at any rate, believed in the principle of arbitration more fully than ever, since it had had a few fresh experiences of the old methods. The failure of the law to prevent strikes was proved, and public opinion wished to see the system placed out of jeopardy. Though unarmed with any legal power, the Court itself endeavoured to save the position by inserting in an award¹ the following novel clause :—

“The union shall do all in its power to prevent any strike by any of the workers affected by the award; and if any strike shall occur in which any members of the union shall take part such strike shall be *prima-facie* evidence that the union has committed a breach of its duty. The Court reserves full power, in the event of any such strike occurring, to suspend, on the application of any of the employers, the operation of all or any of the provisions of this award for such period as the Court shall think proper.”

¹ The Gisborne Waterside Workers, June 1, 1908.

The country could not afford to see the system abandoned. Whatever flaws there were in the machinery, however the law had been prostituted to unexpected purposes, the fact remained that in its existence of thirteen years, during which there had been an average of a quarter of a million wage-earners in the Dominion, there had been only eighteen strikes, and of these only a dozen were illegal. The number of men engaged in illegal strikes was only one-third per cent. of the total number of wage-earners in the Dominion: whereas in Great Britain in a ten-yearly period—1891-1900—something like 20 per cent. of the workers had been out on strike. The employers demanded that the Act should be maintained; and the workers themselves, though in revolt at the economic pass at which they had arrived, realised plainly that they had everything to lose by a reversion to unregulated relations. They said :—¹

“We want the Act as originally conceived by the framer. . . . The failure of the present Act is due to the fact that employers have designedly ignored the boards and relied on the Court. The constitution of the Court, with its legal encumbrances and formula and the unconscious bias of its president, makes the odds two to one against the workers every time. The Court has of late, in addition to its failure to improve the industrial conditions of workers, attempted to usurp the power of the Legislature, and each attempt has been with the object of depriving the worker of constitutional rights already granted. We for the time being advise the workers to adhere to the principle. As an improved method of settling industrial disputes conciliation has always been advocated by the workers, and we again urge the importance of it. Only as a last resource should the Court, in our opinion, be resorted to.”

The only prospect for the rehabilitation of the Act in the goodwill of the workers was to bring it back as closely as possible to the conciliation ideal, and eliminate the

¹ Manifesto of the Wellington Trades and Labour Council, July 2, 1908.



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rigidly legal aspect which had succeeded to the discrediting of the old boards. The *impasse* was tackled with characteristic courage by the Minister of Labour¹ in 1908 in a measure which pays a remarkable tribute to the foresight and statesmanship of the original designer of the arbitration laws, the Hon. W. Pember Reeves. So far as can be judged the amending law of 1908 corrects the whole of the false tendencies in the existing law. It attacks all the cancerous and fungus diseases which have grown up in the young organism, and brings it back to something approaching the state of health in which it was originally.

The Conciliation Boards, grown hateful and dishonoured by abuse, are nominally abolished, and in their place Conciliation Councils, very similar to the bodies which have done so much to regulate industrial relations in England, now deal with the disputes. This, to all intents and purposes, brings into prominence the special boards which occupied a retiring position in the original law, and of which only a single one had ever been set up to deal with a dispute. The chairmen (or commissioners) are appointed by the Government for a term. In case of a dispute arising each side nominates an equal number of representatives, and this body, presided over by a commissioner, deals with the dispute. The duty of the Council is simply to bring about a settlement expeditiously and amicably, and it has power to do whatever it thinks proper to this end. There is no formality. There is no restriction. The proceedings may be public or private as the Council desires. If a settlement is arrived at, well and good. If not the Court is invoked, but the Court has discretion to refuse to make an award, if for any reason it considers it desirable to do so. The Court becomes, indeed, what it was always intended to be, a court of appeal.

But the new Act strikes an original note in its method of dealing with strikes and lock-outs. In this it follows more the drastic expedients of some of the Australian

¹ The Hon. J. A. Millar, now Minister for Railways.

States. Specific fines are provided for participation in strikes, either by worker or employer. Inciting to strikes or lock-outs, aiding or abetting, and assisting with money or other valuables, are made penal offences on the part of any person or body, and if more than half the members of a union are on strike the union is deemed to be the instigator. The general public is protected against sudden dislocations of services of utility by a special penalty, which may be inflicted in the event of interruption of the supplies of gas, water, electricity, meat, coal, or milk, or of the services of ferries, railways, and tramways. If organised bodies of either workers or employers are found guilty of participation in strikes or lock-outs, their registration may be cancelled by the Court for any period not exceeding two years. During this period the organisations may not take part in arbitration proceedings or enter into any industrial agreement. The operation of existing awards is suspended, in so far as it affects all members of the union at the time of the offence, and no other union in the same trade may be registered. Imprisonment for recovery of a fine is now abolished, but the wages of a convicted worker may be operated on, until the amount is made good.

Though the new conditions have not been in force long enough to judge of their success, there is little doubt that the machinery of conciliation is materially strengthened by the amendments. If there are still flaws, Parliament will persevere in the effort to remove them, but it is unlikely that the arbitration system will ever again be subjected to the test which it underwent in its first years, when the capitalists to a man were arrayed against it, and crippled it in its main activity by refusing any sympathetic co-operation. To-day all classes in New Zealand are firm believers in a legislative object which has abolished sweating and the evils of child and female labour, stopped under-cutting, produced healthy competition, and practically eliminated the strike and the lock-out from the consideration of business men.

Nor has arbitration fulfilled the gloomy forebodings of

its critics. During the fifteen years that the Act has been in force the number of factories has increased three-fold, of workers twofold. It may be that some of the industries to which arbitration applies could not live without the protection of tariffs. That might be said also of industries in some of the greatest manufacturing countries in the world, where freedom of relationships is almost absolute. In any case the people of New Zealand are prepared to make sacrifices for the ideal of being the most self-contained country in the world. Industry has been humanised to an unprecedented extent, and the workers of New Zealand enjoy privileges not elsewhere to be found. Nor can it be said that capital is endangered in the least degree. The opinion of those who have opportunities for knowing is that its investment is rendered more secure by the elimination of reckless and unscrupulous phases of competition.

CHAPTER XVII

STATE ACTIVITIES

Colonial Socialism—Not of the Red Flag order—State Socialism and Imperialism—Recognised limits of State activity—State grants to assist new industries—Tariff manipulation—Origin of State trading—War against abuses—Government insurance—Public Trust Office—The Liberal-Labour compromise—The Bank of New Zealand case—Cheap money for farmers—Workers' dwellings—Loans for workers—Discount stamps—State coal-mines—A list of activities—Conflict with private enterprise—State fire insurance—Further Socialism improbable—Conservative Liberalism.

THE epithet "Socialist" has for so long been generically applied to the average British colonial in the Antipodes, and particularly to the New Zealander, that it has ceased to be considered a reproach except by the most stringent financial critics.

Judged by Old World standards, the inhabitants of the great oversea States which have enjoyed self-government for some decades must all perforce have advanced some distance along the road to Socialism. Without exception, for example, they have come to regard private interest in land as secondary and subsidiary to the State's interest, regardless of the method by which the State may happen to exert its influence. With few exceptions they are accustomed to look upon it as the prerogative of the State to step in—Old World critics would say "interfere"—wherever there is a conflict between labour and capital: even where the price of the necessities of life is considered excessive. The Old World definition of the colonial Progressive would be "Socialist" pure and simple, or possibly, as a distin-

guished French economist has put it, "*Socialistes sans doctrines.*" This latter definition the more conservative colonials would repudiate with indignation, but the great majority of Progressives would not cavil at the description of the Hon. W. Pember Reeves,[†] himself a typical one, if exceptionally scholarly :—

"To express the kind of profession of faith to which most of them would subscribe is not easy : to do so in two or three sentences is hard. They look upon their colonies as co-operative societies, of which they, men and women, are shareholders, while the Governments are elective boards of directors. They believe that by co-operative action through the State they can compete with trusts and other organisations of capital abroad and dispense with great companies and corporations within their own borders. They see in their half-empty territories undeveloped estates which require capital as well as labour to work them. Even this capital must be obtained and used by the community or the financiers will exploit land and labour both. If the small man is to exist, it must be in union with his fellows : otherwise he will be crushed in these days of giant combinations."

And later :—

"Governmental as he is, the Liberal politician is at heart more of a trades unionist than a conscious Socialist, and the middle-class Progressive is still half a Liberal."

New Zealand is practically guiltless of the Socialism of the Hyde Park orators, the doctrine of the Red Flag, of confiscation and communism. Altruism has made wonderful strides, partly by the regulation of industries and partly by direct humanitarian and other social legislation ; but the severest critics of colonial legislation have long ago withdrawn the charge of confiscation—a fit companion for the baser imputation of repudiation. The Socialism of New Zealand is based throughout on humanitarian principles, and it has found its most active expression in a species of co-operation which does not destroy individualism. Communism, on the other hand, has made

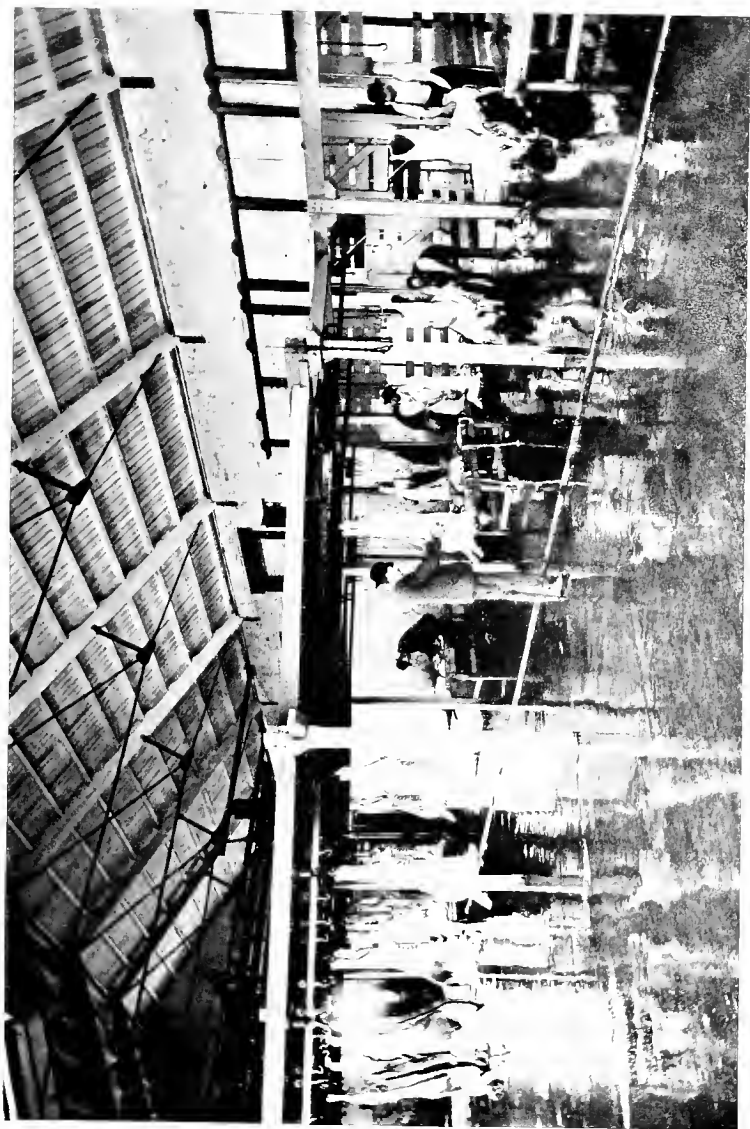
[†] "State Experiments in Australia and New Zealand."

little progress amongst the whites, though the primeval communism of the Maori is even now being applied to industries which seem to be necessary for the future of the race.

The most characteristic portion of New Zealand's experimental legislation, and the part which most evoked the wrath of the critics before experience had shown that it entailed no diminution of loyalty to Imperial institutions, might be classed under the general title of State Socialism. By some latitude in the scope of the term we may take it to include—

1. State regulation of trade and industries.
2. State aid to industries.
3. State trading.

The first of these is in reality merely a phase—possibly an exaggeration—of the general functions of government recognised in all civilised countries. If an employer in England or Russia were flagrantly guilty of such conduct in his business as would lead to the deaths of his workmen, or even if he paid such wages that they could not possibly subsist, it is conceivable that, in the lack of any public opinion to correct the abuse, the Government would interfere. On the other hand, there is still a strong antagonism generally in the Old World to any interference by the State in the relations between employer and workman in so far as it may be supposed to curtail the freedom of contract. Apart from this, what New Zealand has done by legislation cannot be said to overstep the recognised limits of State activity. Practically every commercial country in the world legislates to safeguard its industries from abuse within, and sometimes from unfair competition from without. Disregarding for the moment all the measures which come within the general definition of industrial legislation, we find the State taking upon itself to prevent dairymen from exporting butter that is not of first-class quality, regardless of the fact that there is a ready market for it. Later we find it insisting on a veterinary examination of all meat intended for export, increasing its supervision of the dairy industry to the



GOVERNMENT INSPECTION OF MEAT IN THE MUNICIPAL ABATTOIRS AT INVERCARGILL.

extent of branding each box of butter according to the quality of the contents, and finally applying the same process to hemp and other exports. In each case there was indignant and stubborn opposition on the part of the manufacturing companies. The whole movement was antagonistic to the sacred principle of private enterprise, which had been regarded as the very basis of prosperous industry. In each case the reply of the Government was that, since malpractice and the export of produce of inferior quality tended to destroy the market and to ruin the reputation of the colony, some regulation was essential. And almost without exception the benefit bestowed on the industries by the grading and inspection of the product has justified the experiment even in the eyes of its opponents.

The principle of State aid to industries, which might be expected to earn the reprobation of those who believe in absolute freedom of competition, has of necessity come into prominence in connection with the infant industries of the Dominion. Arguments which may be used against the system in an old-established industrial country scarcely hold in a virgin, isolated, and sparsely populated land. If New Zealand had been content to remain for all time an agricultural country pure and simple, there must always have been a great economic wastage in the reimportation of her own raw material in a partially manufactured state. With such great natural resources—the abundance of minerals of all kinds, timber, coal, wool, and leather—it was impossible long to delay the inception of manufactures. When they commenced in the seventies they thrived on the general prosperity of the time. This failing, they were in a parlous state. Government assistance was invoked. It came first in the simple, crude old form of a customs impost on imported manufactures. Bonuses were offered for new industries—meat-freezing, paper-making, petroleum, &c.—but they were too mean to stand comparison with the bounties paid by foreign Governments. As a general rule the tariff was the only instrument of any real value. It was raised

against manufactures and lowered in favour of the machinery required to start the industries in New Zealand. There was nothing necessarily Socialistic about that.

The most interesting fact for the consideration of economists is the very considerable help given at a later period to the primary producing industries. Grants were made for the construction of races to carry water to the gold-fields. Railways and royalties were set aside to improve the coal harbours. Agricultural lime was carried free on the State railways. Money was advanced for the erection of butter factories. Instructors and veterinarians were appointed to educate the farmers and stock-owners. Compensation was paid to eradicate disease from herds. Stud cattle and horses were imported. Duties were levied on imported foodstuffs. Commissioners were sent abroad and subsidies paid to open up new markets. Heavy remissions of railway freights were granted.

The tariff became the palladium of the new manufacturing industries, while primary industries were assisted by remissions and concessions. At the same time, of course, the State gave liberal subsidies to the expenditure of the local bodies on roads and bridges, to the erection of technical colleges, and for technical instruction in the schools. It is a matter of opinion as to how many of these concessions are Socialistic. Most of them lie well within the limit set by the bounty-fed sugar of foreign countries.

Irrespective of labour legislation, there is probably not much to the account of the State, up to this point, which is not approved by precedent in many old countries. It is under the third head that we enter on debatable ground. State trading introduces an entirely new principle, striking directly at private enterprise and tending directly towards State Socialism. It is stretching the investigation farther than we may to trace the origin of State trading in New Zealand back to the year 1866, when the Cook Strait cable was laid. That has been done, but with the most flimsy

grounds. Private ownership of a cable line twenty miles in length to connect two State-owned telegraph systems would in itself have been an anomaly. Nor, again, can we place it at 1871, when the General Government commenced constructing railways out of loan money. The desirability of unifying the systems of nine provinces in a single country not much larger than England and Scotland was obvious, and more than a decade was yet to elapse before the Government took the actual work of construction out of the hands of private contractors.

We may reasonably fix the beginning of State trading in 1869, but by so doing we must discard at once the impression that State trading is necessarily Socialism. Throughout its history, even when it was so widely extended by a Government which enjoyed the name of the "Seven Devils of Socialism," we cannot find a single instance in which the State has undertaken any new activity purely for the sake of the prospective profits. Every undertaking has been entered upon with the single and specific object of putting an end to abuses, destroying noxious monopolies, or providing the exceptional guarantee of State security for investments. The State resumption of railways did not involve any new departure in public policy, since the railways were already owned by the Provincial Governments. Almost at the same time, Mr. (afterwards Sir Julius) Vogel persuaded Parliament to pass a measure enabling the State to enter into the business of life insurance. There was nothing particularly Socialistic about that. The reasons were simple and apparently legitimate. Within a few years thousands of thrifty people in England, America, and the colonies had lost the whole of their investments in the failure of some great life assurance offices. Vogel was anxious to avoid a possible disaster of a similar nature in New Zealand, and he had little difficulty in persuading Parliament that an office which could give the guarantee of the State with every policy issued would not only be an inexpensive boon to the country, but would directly discourage

companies of poor financial standing from entering New Zealand.¹

For precisely the same reasons the Public Trust Office was inaugurated two years later. If the desire to secure a profit had outweighed the necessity for providing a secure, convenient, and reliable administration of estates, we should not find at the origin of the Public Trust Office a gentleman to whom any form of Socialism was repugnant.² Before the country had a chance to pass judgment on the working of these two Acts—to crave for more or to call a halt as the case might be—a wave of prosperity was ushered in. Immigration, rapid development, new industries, feverish speculation followed pell-mell. Even if the germ of Socialism existed, the time was not opportune for doctrines and propaganda. It was an epoch of action. For awhile everybody flourished. But the crash came. It found the country unprepared. It found labour unabsorbed; immigrants unacclimatised, industries gasping for breath. Its ravages struck all and sundry ruthlessly.

We know what happened—how the people turned to the Government for bread, and received only a stone. The colony was loaded down with its liabilities. It required constant pumping to keep the ship afloat. The whole resources of the time were absorbed in tiding over difficulties by temporary expedients, in trying to settle a disheartened people on the land and in factories bolstered up by tariffs. Now at length the soil was ready for the seed of the propagandists. At the end of the eighties Socialism made a real advance, and if labour had been able by organisation to work independently of the Liberal

¹ In the first year of its existence the Government Life Insurance Department issued 59 policies, valued at £30,250. There are now twelve companies doing life assurance business in New Zealand: 39 per cent. of the current policies were issued by the Government Office.

² The Hon. E. C. J. Stevens, M.L.C., of Christchurch, is said to have been the first to suggest the appointment of a Public Trustee. The office provides a cheap administration of trusts with a State guarantee of security. The Public Trustee now administers about 5,000 estates, valued at nearly five and a half million pounds. A Public Trustee was appointed in England in 1907.

party in politics, New Zealand might indeed have gone to the extremes of Red Flag Socialism. As it happened labour formed an alliance with the Liberal party. With its help the Liberals were returned to power. By this instrument labour obtained the palliatives it desired. But the Socialism of the Labour party, crude and extreme as a propaganda usually is, was kept in rigid check. The Governments of Ballance and Seddon set their faces steadfastly against State Socialism for its own sake. They would entertain no proposal that did not have its origin in an honest desire to check a pressing abuse. Seddon, in particular, as the leader of the party when its strength gave him the position of an autocrat, time and again refused point-blank to entertain the suggestions which were made to him almost every month that the State should step into the arena and operate some new industry or purchase some new utility.

Long before the Liberal Government came into power it was customary for the haphazard propagandists to demand the establishment of a State Bank. When they had been in power but a few years the question was forced upon them in a very insistent form. The manner of its treatment is interesting. In 1894 the Bank of New Zealand was on the verge of a catastrophe. It was hopelessly insolvent. In common with hundreds of smaller concerns the Bank had assumed liabilities and advanced money during the boom days upon securities which had steadily dwindled in value since the depression commenced. In 1889 the position was so bad that the whole of the reserve fund and one-third of the paid-up capital would be absorbed in meeting the liabilities. The coin reserve in 1893 had fallen below the legal limit, but the depression in Australia was so keen that the Government did not insist on increasing the reserves. Suddenly, before the public had had an opportunity of realising the position, the Colonial Treasurer (Sir Joseph Ward) was informed that unless help was forthcoming payment would have to be suspended. The suggestion of State interposition had arisen some months

earlier, strangely enough, with the London shareholders, but the Government was not at all inclined to act until it discovered that the Bank would not be able to keep open for many days.

The failure of the institution would have ruined the majority of the 35,000 depositors in the colony, involved the loss of £825,000 of public money, and brought the whole financial fabric of New Zealand into discredit. The directors practically threw themselves on the clemency of the Government, offering to make any concessions in the control of the institution if the Government would guarantee a fresh issue of £2,000,000 in preference shares.¹ It was one of the crises which showed the quality and the prescience of Seddon. He did not hesitate for a moment, but he made absolutely certain in the Bill which he drafted on the spur of the moment that the State, as Mr. Murray had suggested, would not lose one penny. A secret conference of selected members from both sides of the House was called, and the matter was fully discussed *in camera* on a non-party basis.

As a result, the Government on the evening of Friday, June 30th, brought in a Bill authorising it to guarantee up to a limit of £2,000,000 a new issue of shares, which should be secured on a liability of all the shareholders, and should take preference both as to capital and dividend. Every precaution possible in the time available was taken. Sir Joseph Ward, who, of course, had charge of the Bill, emphasised the fact that the step was taken in the interests of the public, inasmuch as no person or company, however important, was entitled to receive

¹ Mr. John Murray, who had had forty-five years' experience of banking, conducted the negotiations on behalf of the Bank. Writing to the Prime Minister (Mr. Seddon) on June 29th, he said: "I wish to be permitted to give my honourable assurance (1) that the occasion is one of the gravest public urgency; (2) that by the measure I have proposed I am absolutely convinced that the State will not lose one penny, but will, on the contrary, avert great loss to itself as well as to the community; (3) that by this measure the banking affairs of the colony will be placed on a greatly improved footing for the future; (4) that if the Government finally determine to go on with the measure it should be put through to-day."

assistance at the expense of the taxpayers. The Conservative leader (Sir William Russell) found himself in the awkward position of being forced, in the public interest, to support a Bill which went a long way on the Socialistic path towards a State Bank. But under the circumstances, he said, he could do nothing but waive his objections to that side of the measure and urge his followers to support it. It could probably be argued with reason that this exceptional use of public moneys was Socialism pure and simple. As against this we have the best proof, in the words of the Conservative leader and in the disclosures of the Bank's condition, that the actuating motive was the public good. Had it been otherwise the Conservative party, then on the *qui vive* for anything with Socialistic tendencies, would undoubtedly have opposed it. Moreover, in spite of the perennial importunities of the labour conferences, the Government has never shown the slightest inclination to increase the State's interest or control in the Bank. There is, on the other hand, no desire that the Government should withdraw from the institution. It now appoints the president, some of the directors, and the auditor. Under the reorganised management the Bank has steadily improved its position and built up its reserve fund. The doubtful assets have all been profitably disposed of by a board specially set up for the purpose, and the Bank is now again a sound dividend-paying concern. The State did not lose a penny under its guarantees.

Another important financial measure passed by the Seddon Government later in the year 1894 comes distinctly under the definition of State trading. The long period of depression which had banished all hope from the hearts of the agrarian population fell with particular severity on those who had purchased their farms on mortgage during the boom at high rates of interest. Relief seemed impossible. The price of produce fell lower and lower. In some of the best agricultural districts the bulk of the farmers were not free agents to sell their own grain. The evil gathered strength. Many

were forced into relinquishing their holdings. Those who hung on had a millstone round their necks. The Government determined to remove it, and chose as its weapon the establishment of a species of farmers' bank. Power was taken to commence by borrowing not more than £3,000,000 at not more than 4 per cent. interest. Half this sum was raised at 3 per cent., and the Government forthwith made advances to farmers at 5 per cent. on approved securities. The effect was instant. Hundreds of struggling men transferred their mortgages to the easier conditions of the State office. The declining rates of interest encouraged Parliament to extend the borrowing powers from time to time and finally, in 1901, it removed the time restriction altogether.¹ The sum of more than 7½ millions, which has been advanced by the Government to over 20,000 borrowers over a period of fifteen years, has undoubtedly encroached upon the earnings of capitalists, just as the activity of the Life Insurance Department has. Possibly the lender at reasonable mortgage rates has suffered with the usurer. Nevertheless, with certain reservations, this form of State trading now enjoys the approval of both political parties.

It was the same general causes—prosperity and inflated values—which some years later brought the working classes within the cognisance of a paternal Government. The remarkable prosperity at the end of the century, with the increases of wages it gave to the workers, caused rents in the principal towns to soar up, in some instances to the extent of 75 or 100 per cent. The incidence of this new development fell most heavily on the working classes, who were compelled to live within a radius of their employment. Every year workers who were enjoying higher wages than ever before found it more and

¹ The Advances to Settlers Office, from its inception in 1894 to March, 1908, granted advances amounting to £6,937,950 to 19,883 mortgagors. The sum of £4,186,020 was at the end of the period out on mortgage to 11,713 borrowers. The net profits for the year 1907-8 amounted to £51,385. Loans may not exceed £3,000, and they are repayable in seventy-three half-yearly instalments at the rate of £3 per £100, which covers both interest and principal.

more difficult to pay their way. The Secretary to the Labour Department in 1904 addressed to the Government a warning against the trend of things, which was rapidly neutralising the benefits labour had received from the regulation of wages and hours. He suggested, as a remedy, that the Government should take power to purchase land and erect dwellings for workers in the same way that it had found money for farmers. State landlordism was already a well-established principle, and the Government had no difficulty in 1905 in persuading Parliament to extend it. Within a few months the new activity was in full force. Workers' houses were erected in all the chief centres, neatly designed and equipped with all the customary luxuries of a colonial residence, and they were let at a rental equal to 5 per cent. on the capital cost, plus insurance. A short experience of the system seems to have fairly established its popularity—at all events in times of inflated rents. Houses of five rooms, with bathroom and scullery, cost from 9s. 3d. to 10s. 6d. per week. The cost may not exceed £350 if built in wood, or £400 if in brick, and no labourer receiving more than £200 is eligible as tenant. There is a new departure in this form of State landlordism, inasmuch as the tenant may secure the freehold of his home by cash or time payment.

But at best this scheme could only apply to a very small number of workers. The task of providing any percentage of workers with homes is quite beyond the finances of any colonial Government. To reach the others, the Government in 1906 took power to lend money on first mortgage to assist workers in acquiring their own houses. This Act, too, only applies to men with less than £200 a year, and the loans may not exceed £350.

To proceed with the story of State trading. Once upon a time a small foreign company established itself in New Zealand in the business of issuing discount stamps to petty traders, to be given to purchasers of small quantities of goods and afterwards redeemed by the

company. The company soon had heavy liabilities in respect of stamps which were on issue but not yet due for redemption, and the Government was advised that neither the purchasers nor the country had any security for the good faith of the company, which might have found it convenient to abscond at any moment. This was cured by a simple measure naming the Government of New Zealand as the only legal trader in discount stamps, and to-day each quarter's accounts of the General Post Office show transactions to the extent of £600 or £700 for the redemption of stamps presented at the counter by the general public.

From this the Government passed to the opening of State coal-mines. The restriction of the New South Wales output had levied an exceptional demand upon the mines of New Zealand, and for a time coal was selling at famine prices in the New Zealand market. The Government objected to having the supply of the railways imperilled, and equally to seeing the public paying enhanced prices for the most abundant product of the country. As representing the Crown, it actually possessed vast coal measures of the best quality close to harbours which had been made workable by the expenditure of public funds, and Parliament, being complacent, gave permission to work coal-mines as a public utility. All this has happened since the beginning of the century, yet the State coal-mines near Greymouth and Westport have for some years past been raising 200,000 tons of coal per annum, supplying most of the requirements of the State railways and selling coal retail from depôts in a number of the towns. Here and there the Borough Council appears as the agent of the Government in the retail distribution of coal. The prices of State coal are lower than the ruling prices of company-raised coal, but the excellent market for all has forestalled any protest by private enterprise.

Throughout the whole gamut, from discount stamps to coal-mines, we have a dozen State activities which are more or less peculiar to New Zealand. For each and all

the same claim is made, viz., that only the intervention of the State could protect the public from abuse. Water-races were constructed because the miners could neither afford to bring in the water themselves nor to pay the charges which monopolists would have levied for the service. Diamond drills were imported and the rights of the cyanide process purchased to retail their use at reasonable charges. The Auckland oyster-beds were placed under Government management because private pickers, working feverishly at the height of the season, ransacked them so ruthlessly as to destroy the crop in succeeding years. A State sawmill was established near Greymouth and another on the North Island Main Trunk Railway because the Government wanted at reasonable rates timber for its mining and bridges. State workshops were erected near each of the large cities because the Government railways required the ordinary engineering equipment of a railway company.¹ State workshops were erected, too, as at Makohine, because the Government wished to practice economies in railway construction, and to give employment.² But that is another question. The State established fish hatcheries because the rivers and lakes, now stocked with the finest trout in the world, and with salmon, are the natural care of the State. The State imported blood stock because it considered it a duty to make it possible for even small farmers to improve their herds. The State took the town of Rotorua out of the hands of the local authority because the expenditure of State money on baths and resorts was practically the only wealth-producing investment in the district. The State established maternity hospitals because it had reason to believe that the expenses of lying-in and the incompetence of uncertificated midwives were factors in the reduced birth-rate.

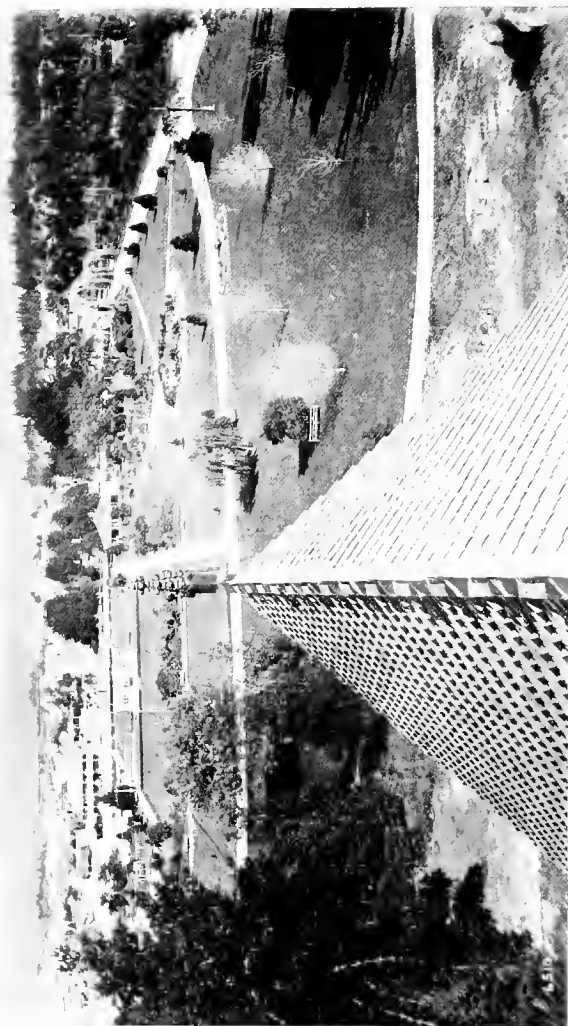
In many of these cases—notably the coal-mines and the oyster-beds—the State came directly into competition

¹ The whole of the railway stock is now constructed in New Zealand. Some of the best locomotives are built by a private firm.

² See co-operative labour, p. 265.

with private enterprise. But the most serious conflict with the interests of existing corporations was set up by the State's entry into the field of fire insurance. This development, which dates from 1903, was bitterly opposed by the insurance companies. The State Office opened at the beginning of 1905 with its rates 10 per cent. below those of the companies, and by the end of the year it had accepted risks amounting to three million pounds. The private companies then commenced cutting by lowering their rates 10 per cent. on certain lines and 33 per cent. on dwellers. They also formed a compact to decline to accept any risks in which the State Office also was interested. The State rates were lowered to the level set by the companies, and business was conducted on this basis for a year, when it was generally recognised that the premiums were below the level of profit. The result of the competition has been to establish the State Office in the country and to bring rates to something like a level considerably below the scale existing before. This fact alone is held to be justification for the intervention of the Government Office.

Generally speaking, State competition has produced much less objectionable results than might have been expected. In what direction the future extension of the policy will lead it is difficult to conjecture. Scarcely a month passes without some convention passing a cheerful resolution demanding that the Government should step in and operate some new industry for the benefit of the public. Now it is banking : to-morrow bakeries : over and over again some moderate reformers have called upon the Government to become the controllers of the liquor traffic : once upon a time it was importuned to become a wholesale tobacco-seller : more than once to purchase steamers to fight the supposed monopoly of existing lines. There was a time—in the height of the maritime strike of 1890—when Mr. Seddon himself thought something should be done towards a State ownership of steamship lines, and he renewed the suggestion when it seemed hopeless, at the beginning of



VIEW OF THE STATE TOWN OF ROTORUA.

The centre of the Hydro-thermal region, from the bath-house.

the present century, to open up new markets for produce through the medium of existing steamer lines.

But of late years the whole tendency has been to leave more and more to private enterprise. It is a swing of the pendulum. Ten years ago the Government would not have dared to suggest allowing private companies to develop the great assets latent in the energy of the rivers of New Zealand. To-day it is the avowed policy of the State to encourage private enterprise in this direction. It is highly improbable now that New Zealand will make any further pronounced advance towards State Socialism until a new temper succeeds to the present mood of conservative Liberalism.

CHAPTER XVIII

STATE RAILWAYS AND GOVERNMENT MANAGEMENT

Railway enterprise—Originates with the provinces—The Lyttelton line—A standard gauge—The public works policy—English contracts—The General Government assumes control—The Manawatu Railway Company—Resumption by the State—The co-operative system—Its philosophy—Bridge-building, &c.—The North Island Main Trunk Railway—The Midland Railway failure—State resumption—An error of policy—Government management of railways—Interest on capital expenditure—A public utility—Concessions to users.

VERY primitive and modest of necessity were the first railway undertakings in New Zealand. The country was impoverished by expensive pioneering and more expensive wars with the natives, and the colonists themselves had little capital to invest in industrial enterprises. On the other hand, the population was small and scattered, and the prospects of profit for many years to come were not such as to encourage English capitalists to turn aside from the many avenues of investment in the Old Country to construct railroads in the uncertain new. If it had been left to private enterprise New Zealand might have waited long years for railways.

In the event the provincial governments—those quaint little parliaments in which were much ability and all the time-honoured elements of parliamentary government—assumed the burden. The very first railway in New Zealand was a foretaste of what the engineers of the future would before long become familiar with. In the South Island ironbound, rugged mountains were the feature; in the North the treacherous soft rocks of the later volcanic formation. Christchurch, the capital of

Canterbury, was separated from its port of Lyttelton by a high range of mountains, and the journey had to be made by a well-formed but steep rock road and thence by the small river Heathcote. Canterbury was a rich province. During all the long, dark days of the North Island wars the farmers and graziers of Canterbury were steadily bringing the land into occupation and shipping their wool to London. The provincial budget occasionally, even in the early days of the sixties, touched a million pounds, and the Council was better able than any other in New Zealand to undertake public works of any magnitude. What it decided upon in 1860 was the bold but obvious step of tunnelling the Port Hills by a bore a mile and a half in length and constructing a railroad from Christchurch to the water's edge at Lyttelton.

Parliamentary sanction was obtained for this first railway, and the General Government announced that on the advice of Robert Stephenson himself it had decided upon 5 feet 6 inches as the most suitable gauge for the whole colony. This decision seems to have been on all fours with the Early Victorian practice of laying off colonial roads and streets in London by ruling them on the map regardless of the configuration of the land. Fortunately it was revised very early, for the Canterbury line was made with a gauge of 5 feet 3 inches, and several of the next provincial lines were 4 feet 8½ inches. Economy was probably at the root of the changes. The tunnel was constructed by contract. The first portion of the line was opened by the end of 1863, and the train ran right through the completed tunnel in December, 1867. By this time short lines were under construction in various provinces. Looking forty years ahead, Auckland started in 1863 the main trunk line to Wellington, which was only completed in 1908. Southland and Marlborough linked up their capitals with the sea. The provinces were independent and parochial. The standard gauge was forgotten and the local governments did as they liked. Later generations would have had a tangle to unravel if

a national policy had not superseded at an early date the local schemes.

When Vogel in 1870 persuaded the General Assembly to make railways an activity of the State there was in New Zealand a little community of a quarter of a million souls, divided into nine distinct governments and taking a healthy local pride in seven distinct railway systems with an aggregate length of forty-six miles ! Vogel never did anything by half-measures. He persuaded Parliament forthwith to sanction the construction by contract of six hundred miles of railway. There were to be lines starting from Auckland and Wellington in vague prediction of the main trunk which should one day connect these points. Another was to start across the rugged Rimutaka range from Wellington towards the remote town of Napier, the capital of Hawke's Bay, two hundred miles distant ; another from Dunedin towards Invercargill ; and finally a trunk line from Dunedin to Christchurch. Contracts were let right and left. The English firm of Brogden and Sons undertook a great deal of the work and wished to import Chinese navvies for the purpose. No sooner was the six hundred miles well in hand than Vogel went on to survey another three hundred and sixty miles. Thousands of labourers were imported, chiefly from England. Within a year or two four thousand were permanently employed. Every year a few score miles were opened. By 1877 the General Government, having taken over the small provincial lines, was operating 1,052 miles of railway. The total cost of the permanent way and equipment to this point was nearly six million pounds. But the colonial exchequer was now getting low. The Grey Government about 1878 undertook the construction of a new line from Wellington up the fertile West Coast into the Manawatu, then uninhabited except by natives. A contract was let and the work commenced, but the next Ministry, in a campaign of reversal, abandoned the work and left the first mile, a very expensive stretch, as an endowment to private enterprise.

The Vogel policy had run its course on borrowed money, and Parliament was easily enough persuaded to allow private individuals to enter the field and make railways as business ventures, if they thought it worth their while. And they did. The city of Wellington, walled in on its harbour by towering hills, had already become something of a commission agency for a wide expanse of country, and had done all too little colonising for its own future welfare. But at this point some enterprising spirits, courageous in the face of a staggering depression, took up the Manawatu scheme, secured the Government endowment of land (equal to one-third of the cost of the line) and the first mile of construction (already completed), and set to work. The history of the Manawatu railway is one of the most picturesque incidents in the industrial narrative of New Zealand. The hope of constructing the line for half a million pounds was disappointed. With the long and treacherous tunnelling near the Wellington end it cost £850,000, or more than £10,000 a mile. The Company's hope of supplementing its capital by early land sales was also disappointed, because the land settlement schemes of John Ballance withdrew the temptation to purchase. But in the end the Company triumphed handsomely. It was not until 1886 that the line was completed throughout, but in a period of twenty-two years from that date the Company paid dividends equal to 5 per cent. for the whole period of its existence, and when the line was finally resumed by the Government at the end of 1908 the shareholders received slightly over £3 for their £1 shares.

The position of the line made it imperative that the Government should sooner or later secure it, and the Company's charter made full provision for State resumption at a certain period. The action of the Government in the final adjustment received the cordial approval of the shareholders.

The resumption of this line synchronised with the completion of the trunk communication between Auck-

land and Wellington. This great work was a striking example of the inefficiency which sometimes does—and which some claim always must—characterise works carried out by a State Department as against private contractors. The line, as we have seen before, was foreshadowed even earlier than the Vogel policy, but as most of the route lay through disturbed and imperfectly known country, the scheme made slow progress. It was a huge undertaking for a Government reduced in its finances by the depression then prevailing, the result of a decade of debauchery, and it was undertaken at almost the bed-rock of the depression. The Minister of Public Works was the Hon. E. Richardson, who had been one of the contractors for the Canterbury tunnel. A loan of a million pounds was raised in 1884, and the following year work was commenced on the span of 212 miles which separated the railheads at Te Awamutu on the north and Marton on the south. It was soon discovered that the estimate was too low, and the cost of the railway was then remodelled at £2,085,000. Already the lack of funds was beginning to tell its tale, and for some years the line scarcely figured at all on the Estimates. In ten years the million loan was exhausted, the result being 59 miles of completed line, 21 partially completed, and 135 in the different stages of survey. In addition, the freehold of 1,140,000 acres of native land and the leasehold of 130,000 acres had been purchased.

Now the work took on an entirely new aspect. The Liberal Government—practically the continuous Ministry which still holds office under Sir Joseph Ward—had come to power with a very definite mandate to right the wrongs of the working classes, and to relieve the distress of hundreds of the derelicts of the previous period of despondency. Sweating was rampant in all trades. Even in contracts for earthworks there was sub-letting, and labour was such a glut in the market that the workman was glad to get employment at any price. John Ballance was “out” against sweating, and his lieutenant, Richard J. Seddon, waged ruthless war against it in his



GOVERNMENT RAILWAY WORKSHOP AT HILLSIDE, DUNEDIN.

own Department of Public Works. He absolutely forbade the recognition of sub-letting in all State contracts, and when contractors repudiated their obligations on the ground that they were not allowed the customary freedom of contract, Seddon boldly decided to cure the whole trouble by becoming his own contractor on behalf of the Government. The day-labour system, he could see, would entail far too much administrative work on the Department, but with his quick constructive faculty he devised something well calculated to overcome most of the difficulties. Experimenting on a piece of railway construction on the West Coast of the South Island, he divided the workmen into gangs and let a portion of the work, at a price fixed by the engineer, to each gang, the members of which at its completion divided the money. All the material required was supplied by the Department.

At the outset obvious objections were urged against this crude form of co-operation. The efficient men in a gang complained that the inefficient were a drag on them. So the gangs were first reduced in size. Then they were classified. Finally men were allowed to form their own gangs; and this eliminated the main objection. There can be no doubt as to the quality of the work done under the co-operative system. The Government engineers are themselves the overseers, and the work is, if anything, better done than under the contract system. If the Government had not been under the necessity of alleviating the distress of thousands of workmen of questionable efficiency: if it had had before it merely the customary desire of the private contractor to employ only the most capable navvies, there can be no doubt whatever that Government works would have been carried out not only more efficiently as to speed, but more economically than under the contract system. But the Government was not merely a business concern. From the mistakes and misfortunes of the past it had inherited certain very weighty social responsibilities. The mere effecting of economies in public expenditure and the hastening of public works were in themselves no

palliatives of the twin evils of unemployment and sweating which the Government had been returned to cope with. It was their mission to provide some immediate relief for the drifting, unattached population now centred in the towns, and well designated "unskilled labourers." As the experiment justified itself hundreds of these men were drafted through to the great public works which were in progress all over the country. Many, of course, failed, but their failure did not entail any loss or injury to the State which had endeavoured to help them. As a general rule, especially as the system of selection and "ganging" became more exacting, the men earned what they were capable of. The chief loss to the State was in the slower rate of progress caused by the employment of under-rate men, and the consequent waste of interest on the money already expended.

In its possession of an engineering staff of high efficiency, the Government was encouraged to enter upon other engineering works on a large scale. Public buildings were erected partially on the co-operative system. Bridge-building became an important industry. The most notable structure of this kind was the Makohine viaduct, on the North Island Main Trunk Railway. The tenders for this work in 1896 so far exceeded the estimate of the Government engineers that it was decided to carry out the work through the Department, and large workshops were erected on the site. It was a matter of the greatest difficulty to secure for the piers a firm foundation in the solid rock underlying the shifting *papa*, and by the time the viaduct was completed in 1902 it had cost considerably more than the figures asked by the private contractors, besides delaying for some years the completion of the line. Of course, the extra outlay was not all loss. The Department had now a thoroughly equipped shop which was used in the next few years for the construction of a host of large and small steel bridges, and it had a staff fully conversant with this new development of engineering.

The remainder of the railway lay through exceedingly

difficult country, involving an almost endless succession of cuttings, tunnels, and huge bridge works. At one point, in order to gain elevation, the track has to double on itself and cross in a "spiral" containing two large tunnels. But money was now abundant, and the Government, having no further excuse for prolonging the work, hastened it to completion within the last four years. When the junction between the ends was completed in 1908 the North Island Main Trunk Railway had surely established a record for slow construction—212 miles in twenty-four years, or at the remarkable rate of less than nine miles per year !

If we consider this work as a business undertaking pure and simple it will not stand investigation. The splendid triumphs of engineering which mark nearly every mile of the line could never redeem the work from classification as a costly failure for State enterprise. But we cannot honestly take up that point of criticism. Where a private firm of contractors would become bankrupt and go perforce out of existence, the State may continue, if the public will permit, to operate on the public funds and, by giving employment, opening up the country, and conferring collateral benefits, may justify its policy. There has been no charge of corruption or malpractice against any Government in connection with this huge undertaking. The political conditions of the day, the frequent changes of administration, the financial stress of the country, are sufficient in extenuation of the slow progress of the first ten years. For the change of policy thereafter responsibility must be ascribed to the bloodless revolution of the early nineties, with its altruistic principles and its new standards of governmental morality. The co-operative system was the Government's method of fulfilling its mandate and meeting the humanitarian demands of the day. And it did so effectively. Many men who were drafted out of the towns to the co-operative works and the State training farms were afterwards able to secure farms for their own use in close proximity to their work, and so pass into the settled

agricultural population. Sooner or later the State would have to provide, in workhouses or charitable aid, a remedy for the existing social evils. The Government elected to do it in a militant and practical way.

It is not inconceivable, but it would be a strong-minded community indeed that would insist upon a return to the days of private enterprise in public works or services. With the solitary exception of the Manawatu Railway, private enterprise has not been very happy in New Zealand railways. There was the case of the Midland, for example. It was another of Vogel's 1870 schemes to connect the east and west coasts of the South Island by means of a railway through the mountain barrier of the Alps. Vogel was again in the Government fifteen years later when a Bill was passed authorising the construction of the line by a private company formed to take over a contract entered into in 1885, and to construct the railway on the land-grant system. A new agreement was entered into in 1888 to make the railway from Christchurch overland to the West Coast seaboard, and thence northerly to Nelson, a total distance of 235 miles. All the remaining Crown lands in the provinces of Nelson, Westland, and Canterbury—more than six million acres—were ear-marked, cut up into blocks, and appraised at not less than 10s. an acre, the rough valuation of the whole area being £3,150,000. For every pound expended on the railway the company was to select land to the value of 10s. Let us see what sort of proposition the company was "up against."

Right in its path lay the barrier of the Southern Alps, with its everlasting snow, its school of peaks over 10,000 feet high, and its thirty-mile belt of barren, arid rock or precipitous, forest-clad heights. The solitary depression by which it could be passed lay 3,000 feet above sea-level, and it was proposed here to construct the line with a gradient of 1 in 15, and to employ the central grip rail. On the western slope lay the coastal strip of land, rich in resources it is true, but narrow and limited in extent. Northward to Nelson again the country is more or less

rough, with limited areas suited for agriculture. At one spot a tunnel was required upwards of a mile in length : at another fifty bridges (varying from 22 feet to 968 feet in length) in a distance of thirty-five miles.

The company called up half its capital of £500,000, issued debentures for £745,000, and started merrily to work. Something more than eighty miles of the line was completed, and the company selected its lands and resold them at an average profit of 35 per cent. But now, with the faintest possible hope of getting the capital to carry out the most difficult portion of the work, which was still all before them, the company came to a standstill. The exchequer was empty : the prospect of raising more money was poor. There was not a ghost of a chance of going on. When in 1895 the contract time for completion of the work arrived, not one-fourth of the necessary expenditure had been incurred. By its failure the company had forfeited its rights under the contract, and the Government stepped in and took possession of the line. The company claimed damages amounting to £1,800,000, but the action of the Government was sustained by the Judicial Committee of the Privy Council, which held the State indemnified. As a result, however, of petitions to the New Zealand Parliament, a Parliamentary Committee recommended the payment of £110,000 to the debenture-holders and £20,000 to the shareholders in consideration of the losses they had sustained and the profits derived from the finished portion of the line while it was being worked in trust.* Parliament eventually voted £150,000 as a compassionate allowance, and it was thankfully received in full satisfaction of all claims.

In its subsequent action the Government can scarcely be said to have acted so judiciously. Its duty in taking over the railway and safeguarding the country from further loss was plain ; but it was under no manner of

* In 1891 the expenditure on the opened portion of the line was only 66·88 per cent. of the revenue. By 1898 it had increased to 99·99 per cent. The line was working at a loss.

obligation to persevere in an undertaking which a private company had found unprofitable and commit the country to a questionable and very considerable outlay. The colony stood absolved and uncommitted, and the Government should have refused to undertake any further liability without sound prospects of success. No fault could be found with the suggestion that each end should be advanced to a position where further profit could not be expected; but the prosecution of the work through the Alps has always been regarded dubiously by business men. The country between the present rail-heads is rough and mountainous, and quite incapable of any development which would pay interest on such an expensive undertaking. The cost of about thirty miles of very expensive construction must be a permanent charge on the revenue from the through traffic.¹ The Otago Central Railway is one more for the prosecution of which the State has frequently been assailed.

By the acquisition of the Manawatu and the Midland railways the State is now in possession of practically the whole of the railways of New Zealand, aggregating over 2,600 miles. Within the last four years 140 miles of new line have been opened.

It is scarcely possible to make any comparison of the working results of the New Zealand railways as compared with those of privately owned lines. To begin with, there is no competition. The State owns the whole system, and its efficiency is dependent rather on the accepted goodwill of the Government managers than on the usual incentives to efficiency in business. There had formerly been a desire to make the railways paying concerns, as in the case of privately-owned systems; but the Liberal Government, under the influence of the times, took an entirely new view of the function of State railways. At a time when the opening-up of the land was

¹ The steepest gradients of the Arthur's Pass line are to be avoided by the construction of a tunnel $5\frac{1}{2}$ miles long, the contract for which, at the sum of £599,794, has been let to a New Zealand firm. The work was widely advertised in Australia and England. The only English tender was for £688,216. Another New Zealand firm tendered at £628,732.

the very creed of progress, the Government determined that the railways should be an effective and active co-adjutor. They had been constructed out of moneys borrowed at rates of interest varying from 3 to 6 per cent.—the great bulk at 4 per cent.—but the Commissioners in whose hands they were had not been able to squeeze out of the revenue more than £3 1s. per cent. on the capital cost. In the year after this interest was earned the Government resumed direct control, and announced its intention of utilising the system for the benefit of the people rather than for the purpose of making a profit. It was therefore decided that any profits over and above £3 per cent. on the capital expenditure should be returned to the public by way of concessions in freights and passenger fares. Since 1896 the profits have every year been upwards of £3 per cent., and concessions amounting to more than two million pounds have been returned to the public. Agricultural lime is carried free up to a distance of 100 miles; stock travelling to agricultural shows, children journeying to school or technical classes, delegates to conferences, workers dwelling in the suburbs of the large cities—all reap the benefit of these concessions.

It is open to question whether the railways are really paying as well to-day as in the days of the Commissioners, when they did not get credit for a great deal of work done for other departments of the public service. In any case the percentage of expenditure to revenue has increased from 61·35 in 1896 to 70·59 for last year, and the comparison in the following table leaves room for improvement:—

STATE RAILWAYS ONLY.

		Train Miles Run.	Gross Receipts.	Percentage of Net Revenue to Cost.
			£	
Queensland	...	6,126,136	1,829,673	4·20
New South Wales	...	12,949,068	4,709,406	4·94
Victoria	...	10,035,914	4,012,641	4·00
South Australia	...	4,365,144	1,589,386	4·76
Western Australia	...	4,180,796	1,537,333	3·90
Tasmania	...	981,379	258,223	1·84
New Zealand	...	7,051,274	2,761,938	3·33

Whatever may be the value of the railways as a business proposition, they are definitely established in popular favour as a legitimate sphere of State ownership. The services are good for such a country, many of them comparing very well with the systems of older countries. The public is considered in every respect, and consequently the public is quite willing that the railways should not be run to the last margin of profit. They carry the whole population of New Zealand ten times over in the course of a year, and freight equivalent to five tons per year for every man, woman, and child. The net earnings per mile are more than £330 per annum.

CHAPTER XIX

A COUNTRY OF ENGINEERING

Some natural obstacles—The Lyttelton tunnel—Hon. E. Richardson—Difficult railway works—The North Island Main Trunk—A remarkable undertaking—State engineering—Railway workshops—Construction of rolling stock—Shipbuilding—Brigs and scows—Steamers—Output of local yards—The future of shipbuilding—Graving docks and slips—Agricultural implement-making—Competing against England—A healthy export trade—Advantages of competitors—Gold dredges—New Zealand engineers abroad—An industry of small beginnings—The outlook for capital—Wealth in water-power—The policy of the Government.

As Holland was cut out for dykes and canals, so New Zealand is by force of nature the home of huge and bold engineering works. Providence bestowed many luxurious benefits upon the Long White Cloud, but it had no mind that they should be too easily exploited. The wealthiest plains were severed by high, precipitous mountains from the haunts of man. The little settlements that clung to the coasts like fishing villages were as often as not hemmed in to the water's edge by the frowning sides of extinct volcanic craters, or cut off from the trading brig that rode out the storm in the offing by an impassable barrier of surf from the long Pacific swell.

Within a year of landing the pioneers of Wellington discovered that they must abandon the fertile flat upon which they had established the city of Britannia, and endeavour to plant their capital on the cramped hillsides overlooking Lambton Harbour. It took adventurous men some years to discover a pass over the towering, inhospitable Rimutaka mountains into the wide plains of the Wairarapa, from which the crack of the sheep-

farmer's rifle could almost be heard in Wellington. The homely pilgrims of Canterbury had to tunnel a mile and a half through a wall of igneous rock to make an outlet for their town on the sedgy banks of the Avon to the deep water at Port Lyttelton. Anon the dour Scots of Otago were compelled to cast the lead to discover the bottom of the swamp through which their arterial road had to pass. From the earliest problems in earthworks that confronted the pioneer, up to the present day, civil engineering has been of the utmost importance to the development of New Zealand.

The first great engineering work, the boring of the Lyttelton tunnel, was a daring, precocious undertaking. An English engineering firm undertook the work subject to an inspection of the ground, but the survey disclosed a wall of rock of such intense hardness that the firm threw up its option. Dr. von Haast (afterwards Provincial Geologist for Canterbury) declared that this was the igneous shell of the crater which now forms the harbour of Lyttelton, and that apart from it the hills contained much easily negotiated ground. On his report a colonial firm undertook the work. The drills were quite unequal to the hardness of the rock, and when one of the principals was in England searching for harder steel he met a representative of the Mont Cenis tunnel constructors in the same quest. At length the tunnel was completed, 1 mile 55 chains in length, at a cost of £200,000. The Roman tunnel by which the Alban Lake was drained was at that time the only other case on record of the piercing of a crateral wall.

The chief contractor of the Lyttelton tunnel was the Hon. E. Richardson, a gentleman trained in railway construction in England and Ireland. A few years later he was Minister of Public Works in the General Government, and in that position he was responsible for giving effect to much of the engineering programme which was embodied in the great developmental scheme of Sir Julius Vogel. The bold and elaborate railway policy of the next twenty years was more remarkable for the skill



NGAURUHOE, THE ONLY ACTIVE VOLCANO IN NEW ZEALAND, UNDER WINTER SNOW.

and courage with which tremendous engineering difficulties were overcome than for the wisdom with which they were courted. Mr. Richardson was responsible for the execution, not always for the design. There was, for example, the remarkable railway across the Rimutaka mountains to bring the rich plains of the Wairarapa within reach of the city of Wellington. Long years were absorbed in exploration and trial surveys, and eventually, to avoid the construction of an expensive tunnel, a route was decided on which takes the railway over a summit on a gradient which requires the use of special engines of the Fell design and the central grip rail. The policy of this route has frequently been criticised: the execution never. The chief drawback of the Rimutaka incline, which is the only distinguishing feature of the journey of 208 miles to Napier, is the expensive haulage and the delay caused by the steep gradient. But in spite of this the line pays handsomely, there being no other outlet for the produce of the vast Wairarapa plains.

On the West Coast, too, the producing lands of Wellington Province were only approached by a feat of engineering. Under the Government programme of railway construction, the line dashed straight into the hills behind the narrow littoral of the harbour. The first stage of forty miles is one continuous succession of tunnels, fillings and cuttings, which in the early days of the railroad entailed constant attention and repairs. In Otago, too, arterial lines had to be driven through a succession of precipitous hills and mountain gorges. The great expense of this sort of construction was one of the chief reasons for the reduction of the standard gauge from 5 feet 6 inches, as originally proposed, to 3 feet 6 inches.

The greatest railway undertaking in the Dominion is the connection between Wellington and Auckland, which has been referred to elsewhere. In its whole course of 428 miles this line passes through every conceivable description of country. From rolling downs at the northern end, it traverses the sedgy morasses of the

Waikato and thence through a belt of more or less igneous country into the rugged and tangled zone of volcanic land, now heavily wooded, on to the flat pumice-covered steppes of the inland plateau. Passing round the rough flanks of the central mountains, the route traverses a belt of apparently simple but highly deceptive hilly country, under which the *pāpa* clay forms a treacherous foundation for both the line itself and the numerous bridges which are required. At one point, to gain elevation, the line actually crosses itself in a tunnel cut out of the boulder-studded *débris* of pristine eruptions. Elsewhere the rails are flung across gaping mountain gorges on steel truss viaducts of beautiful proportions, while far below the trout-inhabited stream glitters like a band of silver. The North Island Main Trunk is no less remarkable for the consummate skill displayed in its construction than for the wonderful panorama of scenic beauties through which it passes. It is a lasting monument to the skill of New Zealand engineers, for the great majority of the men engaged in this work were trained in the service of the Public Works Department. Every mile of the route is marked by the overthrow of some engineering difficulty—the diversion of a stream, the underpinning of some towering bridge in the treacherous *pāpa*, the boring of a tunnel through the solid rock.

In the early stages most of the work, including the bridges, was done by private firms, but the Government, under pressure of a social movement in the nineties, gradually assumed control of more and more of the actual construction. Eventually it became the direct employer of the labourers. State engineering shops were erected along the line, from which for some years was turned out the whole of the necessary bridge work, until the desire to hasten the completion led to the letting of new contracts to private firms. In each of the large cities is at least one engineering firm capable of carrying out the largest undertakings in steel construction, and one of these received contracts for bridge

construction amounting to over £100,000 to enable the railway to be completed as speedily as possible. The State, too, operated its own sawmill to supply the timber necessary for the smaller bridges and the earthworks. The capital cost of the New Zealand railways to date is about £28,000,000. About one-third of the public debt is represented by railway construction.

Another feature of State engineering which is due to the initiative of the Hon. E. Richardson is the workshops in connection with the railways. Close to each of the four chief centres is a fully equipped shop in which for years past all the rolling stock in use on the Government railways has been made. It is now some years, too, since a locomotive of any kind has been imported for the State lines. When the departmental shops first constructed locomotives, about 1892, they were imperfectly equipped with machinery, and, having to build engines one at a time to meet the restricted requirements of less than 2,000 miles of road, they could not cut the cost to much less than double that of the imported English and American locomotives. To-day the shops are much better equipped, and the decision was come to five years ago to cease importing altogether. As an offset to the expensive production in the early days of the industry the department has now an expert staff of engineers capable of designing engines to suit all the varied conditions of the system, and building them at a cost very nearly equal to that of the imported engines, at any rate within the margin of sacrifice which a patriotic public are generally willing to concede for the benefit of local industry. As the demands of the railway are reduced more definitely to certain specific types of locomotives, it will be possible to specialise to a greater extent and effect further economies in construction.

The first locomotives constructed in New Zealand were a small description of suburban engine, weighing $37\frac{1}{2}$ tons. Two years later, at great expense, a number of strong locomotives of 61 tons were turned out for the passenger services. Altogether the designers of the

Department have produced seven distinct types of locomotives, including a rather remarkable one of 65 tons which is capable of hauling a train of 100 tons up the 1 in 15 grade of the Rimutaka. The latest production, which weighs nearly 100 tons, is for the fast haulage on the heavy gradients of the North Island Main Trunk. Only one private firm in New Zealand (Messrs. A. and G. Price, of the Thames) has entered into locomotive construction, and it is producing engines at a lower cost than the Government shops can. At present it is making twenty engines of the four-cylinder compound type. Rolling stock for electric tramways is also constructed within the Dominion by coach-building firms, but in every case the electrical undergear is imported.

Shipbuilding arrived very early in the history of the young colony, and the industry is certain, from the special advantages it enjoys, to play an important part in the maritime future of the South Pacific. Long before the *pakeha* had become numerous in New Zealand, long before the *mana* of the Queen had been established on the beach at Kororareka, there were a few humble white men dwelling amongst the Maori, speaking the language, and valued and protected by the chiefs because of their understanding of tools and boats and rudimentary shipbuilding. When the warships from the convict stations in Australia and the whalers from the South Seas foregathered at Bay of Islands year after year, cutting spars from the splendid pine forests and replenishing their larders with pork and vegetables, they saw brigs and schooners of beautiful proportions pottering in and out of the bays of the North, some flying the flag of the mission station, some the ensign which England had presented to the federated chiefs. Shipbuilding was an important industry in the far North. From these beautiful land-locked harbours and tidal rivers sallied forth dozens of small vessels on their maiden voyages to the South Seas, to Australia, to China even, and the Pacific slope of America.



A CANTERBURY WHEATFIELD.

After the settlement, too, the colonial brig was the principal ocean liner and coastwise trader for many a long day. Later Auckland took the industry as her own, and the yards on the shores of the Waitemata continued to turn out small vessels for colonial owners. In the fifties they commenced to build steamers. The *Governor Wyntyard* was not a great success, and she went over to Australia to labour out her existence in Port Phillip. The *City of Auckland* failed too; and one scarcely wonders. She was designed to burn wood fuel in a specially constructed grate, and the smoke passed sadly off through a brick chimney! On one voyage of fifty miles, having consumed the whole of her cargo, she put in at a way port for more fuel, and arrived at Auckland two days late. The appliances were primitive in the last degree. Once upon a time, for lack of a derrick, the hull of a new vessel was sunk and the boiler floated over it into place.

At length the colonists, thrown by their isolation on their own resources, graduated to the construction of iron steamers. The first two built in New Zealand were hurried into the water from rival yards at Auckland within half an hour of each other. One of them still runs in the coastal trade. Then there was a lull. Ship-building did not develop so rapidly as it promised. The yards were not equipped for the new phase of iron and steel, and small boats could be obtained at very low prices from the obsolete fleets of the older countries. The "mosquito" steam trade was built up humbly and cheaply. Meanwhile the colonial yards were kept going with the construction of fishing boats, yachts, schooners, brigs, and scows for the timber trade. Otago, too, entered modestly into the industry, turning out an occasional small vessel; but nearly three-fourths of the ship-building of New Zealand to-day is at Auckland, where there are nineteen small yards. At the last enumeration (1906) there were less than 250 hands engaged, and the output (including repairs) was estimated at about £70,000 for the year. The vessels built during 1905 were:—

Tonnage.					Number.	
Less than 50 tons	118
Fifty to 100 tons	6
Over 100 tons	2

By far the greater number of the small steamers plying in New Zealand waters to-day are purchased in England, but it is a sign of the times that the small companies are now able to have them built to order and to their own designs, instead of being content with vessels discarded by English companies. That shipbuilding will eventually be an important industry in New Zealand there can be no doubt. Easily accessible from the sea-frontage are vast deposits of iron ore and ferriferous sand, which furnish steel of the best quality. The coal measures are unlimited, and the latent natural energy is sufficient to meet all the demands for many decades. There is no warrant, however, for predicting any early expansion of shipbuilding. It can only come when the financial fabric is capable of applying great capital to such industrial undertakings.

The geographical position of New Zealand as the terminal of several ocean-shipping lines has thrown upon the Dominion the necessity of becoming an efficient repairing centre for the largest steamers. Auckland has one dock 300 feet in length on the floor and a larger one (500 feet long) equipped for the purpose of repairing war-ships. The floor length of the Lyttelton dock is 450 feet and of that at Port Chalmers 328 feet. All of these will be quite outclassed by the new graving dock which is being constructed at Wellington with a floor length of 651 feet. Each of the large ports, too, has a patent slip capable of taking small vessels. Within a year or two every vessel that touches at New Zealand will find it possible to dock for repairs.

New Zealand engineers have done much to make the farmers independent of foreign manufacturers of implements. In the earlier days the implements used to come chiefly from England. The repairs had of necessity to be effected by the local blacksmith, and he soon developed

into a maker himself of ploughs, harrows, and finally of more intricate machinery. New Zealand farming, too, diverged rapidly from the methods of England and Scotland, and the inventive genius was encouraged to scheme for the elimination of labour as far as possible.

Very soon the stolid, unalterable methods of the English manufacturers were left quite behind. It was far cheaper to import bar- and sheet-iron, nuts and bolts, and to fashion in the colony what was required for colonial conditions than to endeavour to drag English manufacturers reluctantly in the wake of colonial necessities. Not only did the colonial makers satisfy the local farmers with their labour-saving appliances, but they went abroad and competed with the Mother Country. In 1885, when the total output of the New Zealand yards was slightly over £100,000 a year, the manufacturers of the colony were working havoc with those of England in the markets of the Southern Hemisphere. Every year was marked by the advent of some new invention suited to the requirements of the farmer under the Southern Cross, and designed first of all to save labour. Ploughing, harrowing, chaff-cutting, bagging, seeding, wool-packing, every little activity of the farm, was provided for in some cheaper and more effective manner. New Zealand patents reached every state of Australia, South Africa, and South America. In spite of high ocean freights, wool-presses were sent in thousands to South America, ploughs and disc harrows to South Africa and Australia, and chaff-cutters and seed-cleaners to every corner of the vast Australian Continent.

The competition of English and American manufacturers, with their highly specialised methods and their lower wages, soon made renewed inroads on the export trade of the New Zealanders, who were handicapped by high ocean freights. When it came to considering South Africa as a market, for instance, the New Zealander had to make at such a price that there was £3 a ton to spare for the shipping companies. Until the cost of production was enhanced by conditions in New Zealand this

was not prohibitive, but the manufacturers of England and America have now secured an entire advantage in the oversea market.

Meanwhile the expansion of farming in the Dominion itself maintains a very live market for all that the works are capable of producing. There are twenty-nine establishments for the manufacture of agricultural implements, employing about 800 men and paying £80,000 a year in wages. The output increased from £112,000 in 1885 to £200,000 in 1905. At the same time the import of agricultural implements has not decreased. In plain implements of universal use the English makers are still patronised to some extent, and also of course in the heavy traction engines which are every year coming into more general use for agricultural purposes. These and harvesters, of which New Zealand possesses no patent, make up the bulk of the £100,000 worth of imports. Although they enter into direct and serious competition with the New Zealand manufactures, there is no import duty on agricultural implements, and the foreign goods enjoy the double advantage of low wages and low freights. Owing, probably, to the absence of a protective tariff, the New Zealand product is generally quoted cheaper on the home market than in the states of Australia.

It would be a grave offence to the national pride of the New Zealanders not to refer to a branch of engineering which had its birth in the south of the Dominion and spread thence to all parts of the world. The saving of alluvial gold, as we have seen, led to a rather interesting adaptation of the bucket-and-ladder system of dredging to the rivers of Otago. Improvements followed each other in rapid succession, until it is now possible to extract within a small fraction of all the gold from the silt at the bottom of a river, and even from the subsoils of dry land. The electrically driven gold dredge of to-day, which is entirely the product of New Zealand engineering, has reduced gold-saving to a fine art. From Otago it spread to Westland, where the whole of the coastal terraces are alluvial. In its short prosperity of

a little more than a decade the gold dredge has added more than £8,000,000 to the wealth of New Zealand, in spite of the floating of a shoal of wild-cat speculations.

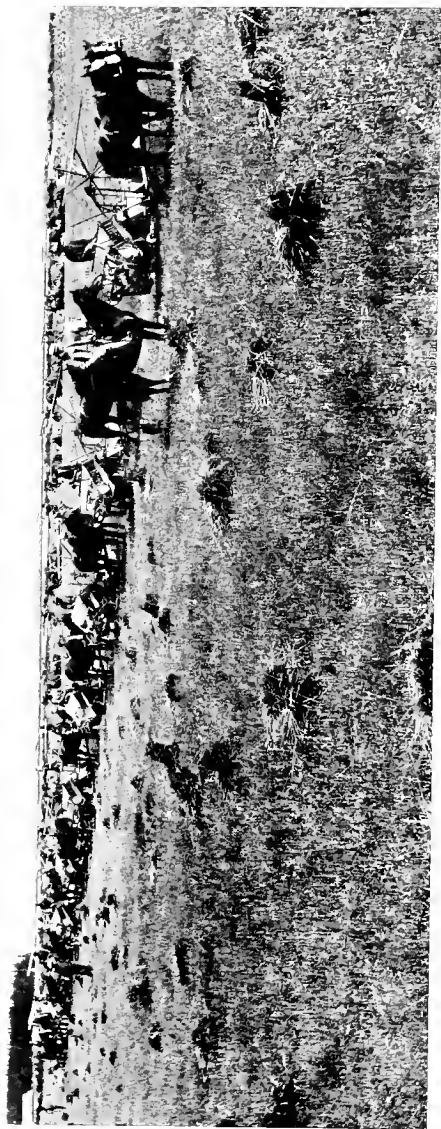
New Zealand engineers—young men trained in the schools of mines and afterwards in the compulsory term underground—went abroad with their knowledge. Dredges—at first made in New Zealand, but afterwards locally—came into being on the gold-bearing rivers of Australia. Thence farther afield: and to-day the young New Zealand dredgemaster swelters in the steam of the North Borneo and Ashanti forests, in the Philippines, in Mexico, Brazil, Colombia, Ecuador, and a host of tropical countries. New Zealand engineers ride out the 40-foot floods on the Irrawaddi, wrestle with the mooring lines in the swift currents of the Yenesei and the Amur, in the streams of British Columbia and California, and far south in Patagonia. Though dredging in New Zealand itself has declined to the dimensions of a remuneratively capitalised industry, the export of machinery is well maintained, not as a source of any great profit, but merely to the extent of a few thousand pounds a year.

What New Zealand has done in engineering can only be duly appraised when it is considered that it was done out of the most restricted financial resources. Most of the engineering firms had their origin in the savings or the modest imported capital of some practical engineer or journeyman forty or fifty years ago. They have grown to their present proportions by the simple process of accretion during prosperity, by extensions out of revenue, by foreseeing a want and providing for it before far distant engineers stepped in. In any other geographical position the small beginnings of New Zealand engineering might easily have succumbed to ruthless competition. As it is, some branches would have failed now and again but for the timely extension of a little tariff protection. On the other hand, one or two of the most flourishing branches have grown up without any protection whatever. With the exception of those

belonging to the State itself, we may say that all the engineering works in New Zealand have been built up on restricted capital. When once the State had resumed the duty of building railways, New Zealand did not offer any avenues for the profitable use of large amounts of capital. Even the shipping companies were founded out of the none too plentiful means of the colonists themselves.

But to-day, again, there are avenues for the profitable investment of capital. The vast imports of machinery of all kinds, amounting to over three million pounds each year, are presumptive evidence of what there is still to be done. Scarcely the fringe of the industry has been touched. Even if the needs should not extend beyond the home consumption, that itself is far from satisfied. Capital entering the field now does so under unusual advantages. The market is practically secured for it, and the unfair competition of low-class traders is eliminated. For its field it will have the wealthiest spending community in the world. For its use it will have the best steam coal in the Pacific available at reasonable rates, vast masses of iron ore awaiting the smelter, and an unprecedented storage of latent power in rivers and lakes.

A few years ago the utilisation of the tremendous natural power of the rivers and lakes was widely discussed, and the Government intended for awhile to make their development a new form of State activity for the encouragement of industry. Some of the rivers were surveyed in 1903 and 1904 with astonishing results. Three of the lakes of Western Otago, for example, were found to possess a potential energy of 1,720,000 brake-horse-power. Nine separate rivers in the Dominion were capable of giving more than one hundred thousand horse-power each. The total amount of hydraulic power in the rivers which rush seaward from the mountain fastnesses and the lake outlets was estimated at nearly four million horse-power, or nearly thirty times the amount of energy at that time being used for tractive and indus-



HARVESTING IN CANTERBURY : EIGHTEEN HARVESTERS IN ONE Paddock.

trial purposes in the Dominion. Lake Tekapo, in South Canterbury, which could command by mains the whole of the industrial systems of Otago and Canterbury, will yield four hundred thousand horse-power continuously at one point, and another 150,000 lower down from the outlet.

"The scheme is an immense one," wrote Mr. Hay,¹ "so will the results be when New Zealand's industrial progress warrants the development. I think the scheme would be a financial success with lower tariffs. . . . The difficulty would be in using the power."

There is enough power in the rivers and lakes of New Zealand to supply the whole of the industries of the United States (exclusive of locomotives) and half as much again as would be necessary for the industries of the United Kingdom.

The whole of this power is now open to be generated by private capital. In 1905 the rights were vested in the Crown, and the Government intended to develop them piecemeal or delegate its powers to local bodies. Later reflection revealed obvious objections to the investment of public moneys in local undertakings, and last year the Government was authorised to grant licenses to private corporations. The only Government scheme of any importance as yet is the lighting of the State township of Rotorua from the outflow of Lake Roto-iti. One extensive scheme was commenced on a moderate scale by a private company operating on the Waipori Falls, not far from Dunedin. The business was acquired by the Dunedin City Council, which now, at an outlay of about £150,000, generates the power for the electric tramways, the public and private lighting of the city, and industrial purposes. This is the forerunner of numerous schemes which must come into existence in the future.

¹ The late P. S. Hay, M.A., M.Inst. C.E., Superintending Engineer to the Public Works Department, and Mr. L. M. Hancock, M.A.I.E.E., Electrical Engineer and General Superintendent of the Transmission Department of the California Gas and Electrical Corporation, both investigated the power of the New Zealand rivers.

CHAPTER XX

SOME INDUSTRIES—SUBSIDIARY, PROTECTED, AND “Coddled”

Grain-growing—Prolific yields—A restricted market—The Australian tariff—A blow to New Zealand wheat producers—The millers' trust—Wheat area reduced—Oats, &c.—Fruit crops—Extensive imports—Lack of capital—Fishing—A subsidised industry—Valuable trawling grounds—Heavy imports—State control of oyster-beds—Tanning and fellmongering—Injured by hostile tariff—A set-back towards the primary state—Boot manufacturing—An unsatisfactory position—Expansion of industries under arbitration—Loyalty to the local manufacturer.

IF Providence had only thrown down some vast industrial population on an overcrowded island in the South Pacific the farmers of New Zealand might be the wealthiest in the world on the single product of their cereal crops. There is not a single cereal which cannot be grown to perfection under the sub-tropical or temperate sun of the varying latitudes.

The wheat of New Zealand is not so hard and bright, and therefore not so valuable for milling purposes, as that of the torrid acres of Australia, but against this the yield is usually 50 per cent. higher. In the last twenty years the average yield of the New Zealand wheat-fields has only once fallen as low as that of the most prolific of the Australian states. In the rich alluvial flats and coastlands of Canterbury it is no uncommon thing to find wheat yields of 100 bushels to the acre. The average yield for the whole Dominion for the past two decades has only twice fallen below twenty bushels; in seven seasons it has been above thirty; and it has averaged

nearly twenty-eight. Except in the well-watered fields of Tasmania, Australia rarely achieves more than twenty bushels in a single season. Not infrequently the yield of a whole state falls below five bushels. In 1903, indeed, the crop over five million acres in the three largest wheat-growing states averaged only two bushels. New Zealand has no such visitations. Providence has given her an unfailing supply of water in the streams that rush down from the sides of the Alps to the sea through the plains of Canterbury, and the settlers have constructed upwards of four thousand miles of water-race to distribute this bounty over 1,200,000 acres of the best wheat-growing and sheep-fattening country in the Dominion. Two-thirds of the New Zealand wheat crop is grown in Canterbury.

It is so again in oats. The New Zealand yield, which is never liable to great fluctuation, stood at 38·82 bushels in 1908, when the Australian crop ranged from 33·94 in Tasmania down to 15·72 in South Australia. And this is a crop which can be grown all over the Dominion. Barley, too, pans out at upwards of thirty bushels to the acre.

But all this luxuriance has an impaired value to the country. By a conspiracy of circumstances the New Zealand farmer is thrown back on the demand of the home market. If he grows a few thousand quarters too much, he pays the penalty of low prices, unless it happens to be a season of over-sea shortage. The great maw of England is fed by the closer granaries of Canada, the United States, Argentine, Russia, and Australia. In four out of five seasons Australia requires nothing from abroad. In the fifth, the New Zealand farmer, if he has looked ahead, vaults cheerfully over the tariff barrier and dumps his little surplus stocks on the drought-stricken markets of the Commonwealth.

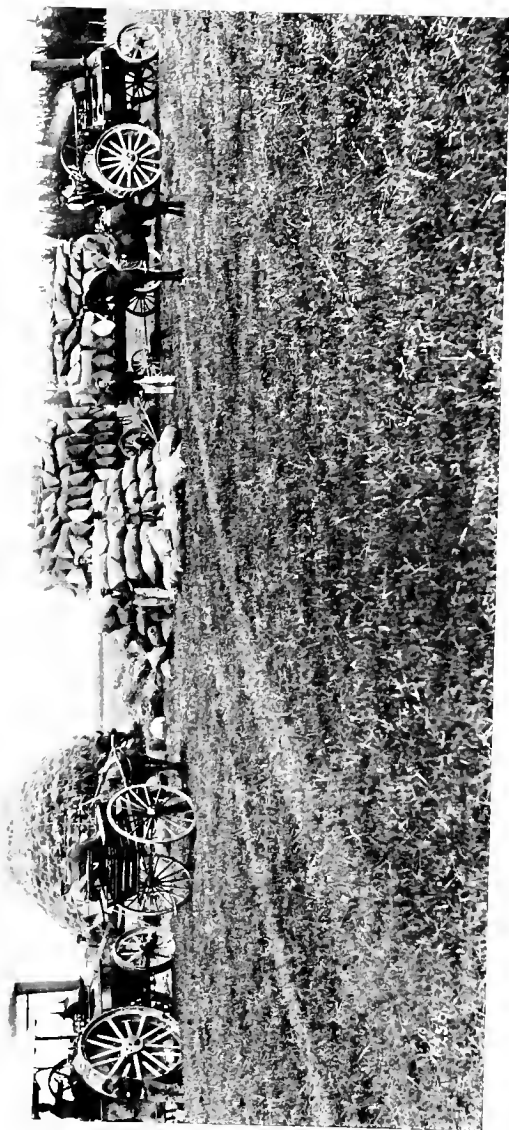
Up to a recent date five or six thousand tons of New Zealand flour used to find its way into Australia in ordinary seasons, and in drought seasons four or five million bushels of oats and as much wheat as there was

to spare. Then New Zealand flour competed with South Australian in all the markets of the Commonwealth, and the wheat area and flour-milling facilities were extended accordingly.

Suddenly the Commonwealth raised a high wall of protection around its products. Flour was punished to the extent of £2 a ton, and other products accordingly. The New Zealand millers were caught on the hop; the farmers were astounded. There was only the home market now to grow for. The millers came to a mutual understanding to make the best of a bad bargain, and incidentally were indicted, under an Act of special origin, with operating a trust to maintain prices above a legitimate level. The charge was dismissed for the moment—this was six years ago—but the suspicion arose again this year in a new form, and the Government took a decisive step, independent of the Act referred to, to break up the “combine.” Meanwhile the farmers threw up wheat-growing. The area was reduced from 400,000 acres in 1899 to 201,000 two years later, and about that level it has remained since, except for an increase of 20 per cent. to reap the benefit of the present world shortage.

To grow wheat for the present population of New Zealand is not a large undertaking. To grow for chance markets either in Australia or Great Britain is positively a bad speculation, and wheat-raising has consequently been reduced to the bare necessities of the year. At a consumption of, say, six bushels per head per annum, this works out at six million bushels, which can generally be relied upon as the yield of 200,000 acres. Most of the other 200,000 has now been converted to the fattening of sheep and the maintenance of dairy herds. New Zealand contributes practically nothing to the general wheat-supply of the world. The export was frequently more than two million bushels a year until the beginning of the present century. It has never reached one million since 1901, and for 1907 there was actually an excess of imports from Australia.¹

¹ During the present year New Zealand has exported upwards of a million bushels of wheat to Great Britain.



CHAFF-CUTTING ON A CANTERBURY FARM.

In oats there is substantially the same story to tell. For twelve years up to 1904 the export (partly to meet the requirements of the Boer War) averaged about four million quarters a year. In one year—1901—it was 10½ millions. Then it fell away almost to a cipher. The tariff of the Commonwealth destroyed it utterly except in drought seasons, inasmuch as the Australian farmers under its protection nearly doubled their area under oats. The area in New Zealand has not shown any appreciable diminution. The demands for winter-feed in the Dominion are such that the area laid down in oats for threshing is never likely to fall much below 400,000 acres. The total oat crop of New Zealand exceeds that of the whole of Australia.

The barley crop, produced chiefly in the provinces of Otago and Marlborough, usually amounts to something more than a million bushels a year, and the quality is famous far beyond the home market. The warmer climate of the North, particularly the Bay of Plenty, produces crops of maize which run to sixty bushels an acre. With an occasional exception the output of cereals of New Zealand is limited strictly to the requirements of the local market. Both the autumn and the spring threshing are simply to feed the local market.

Every variety of English and sub-tropical fruit grows to perfection in the Dominion. The banana and the orange ripen in the North, but both are grown much too cheaply and too well in the coral islands of the Pacific, a few days' steam away to give much encouragement to the white man's industry. In the light lands of the North Island delicious grapes ripen in the open, and throughout Canterbury, Hawke's Bay, Nelson, and Otago thousands of tons of the finest stone fruits are produced every summer. To these are added, from wide areas in Otago and South Canterbury, strawberries which vie in flavour with the best English. Yet the general farmer does not trouble himself with fruit culture. There are less than 30,000 acres of orchards and vineyard, and a country so splendidly situated imports fruit at the rate of half a

hundredweight per head of population each year. There are duties ranging from $\frac{1}{2}$ d. up to 2d. on different varieties, yet 16,000 tons of foreign fruit is dumped into New Zealand each year in cheerful and successful competition with that of the soil. Apples from Tasmania look wild-eyed at those of Canterbury and Otago Central ; grapes from South Australia and New South Wales repose complacently by those of Hawke's Bay. There are no peaches and strawberries to compete with those of New Zealand, but on the other hand thousands of tons of oranges and pineapples and bananas slip in because there is nothing to compete with them at the price.

Experimental shipments of apples to England have been completely successful ; but except where co-operation has been applied, the industry lacks the necessary capital. Fruit farmers have shown a disinclination to risk their capital in a venture which does not seem, on the face of it, to contain any great element of speculation. The Government, on the other hand, does not care to stand guarantor to the extent of 1d. a pound for the success of fruit-growers' shipments, and so very little progress is made. If the fiscal policy proceeds in the future as it has done recently, there will be a tremendous development in fruit-growing and preserving. At present in all its branches the industry employs about one thousand hands. The preserving factories turn out something like £100,000 worth of produce, which is supplemented in the local market by an import almost four times as large. If Protection goes farther its whole tendency will be to encourage drying and preserving in the country, and so to reduce the heavy imports from England and the Pacific slope of America. There are excellently equipped jam and preserving factories, particularly at Dunedin, Nelson, Hastings, and Auckland, and sugar-refining, as we have seen elsewhere, has become established on a basis that should satisfy the severest economists of either fiscal caste.

But the greatest of the natural products which is left undeveloped is in the waters about the New Zealand

coasts. The territorial waters of New Zealand, with its countless inlets and islands, are simply teeming with valuable food fishes. It was this limitless harvest of the sea that in prehistoric days made Te Ika a Maui a fruitful abiding-place of the Polynesian venturer. The Maori, it is true, made food of certain varieties of fish—shark, for example—which the white man does not relish, but irrespective of these the waters of New Zealand yield inexhaustible supplies of the finest food fish.

Away back in the eighties, when the Government was frantically anxious to start new industries, bonuses were offered on every pound of fish exported. The result was not what it might have been. In nineteen years 59,600 cwt. had been exported, and the State had paid $\frac{1}{2}$ d. a pound on it. Then the bonus was discontinued, and the export, instead of falling off, increased with a fortuitous bound. The cod of southern New Zealand is an established delicacy in the eastern states of Australia, where, too, the oysters of Stewart Island are much prized. Fish canning, which has its chief centre in Auckland, is almost confined to the mullet—a very delicate table fish. But altogether the 600 tons of fish exported from New Zealand is a poor offset to the 1,000 tons of imports—chiefly anchovies and herrings from the United Kingdom, sardines from France, and salmon from the Pacific Slope of America.

The export, however, does not in any way reflect the extent of an industry in which upwards of one thousand men, hundreds of boats, and some dozens of modern trawlers, are already engaged. The State has spent a considerable sum during the last few years in deep-sea investigations, which have established the existence of extensive trawling grounds all around the coasts, and capital is steadily being brought to bear on the industry. The reckless collection of oysters by private fishermen, regardless of emaciation of the beds and permanent injury, was directly the cause of Government "interference" in this branch of the industry. The beds of the Auckland Province are now entirely under State control.

The oysters are picked and fed to the market by employees of the Marine Department, and a regular supply at a uniform price is thus maintained without injury to the beds.

The rivers and lakes of New Zealand are simply teeming with fine trout—chiefly brown trout (*Salmo fario*), Loch Leven trout, and the rainbow (*Salmo iridens*)—the product of ova first introduced in 1867. All varieties grow to an unusual size, frequently upwards of 20 lbs. In several varieties the larger fish live in the sea-water at the mouths of rivers, only running up to spawn. After many failures, the quinnat salmon has also been successfully acclimatised. Though so plentiful, trout are protected by law and can only be taken by license. The regulations definitely exclude them from the list of marketable fish.

The treatment of skins in their various stages has generally been accepted as a legitimate industry for a primary producing country. Tanning and fellmongering have been dealt a severe blow by the same tariff measures of the Commonwealth which struck the grain-production of New Zealand. That tariff is so designed as to encourage the employment of labour within Australia, and it falls most heavily on articles upon the preparation of which labour has already been expended elsewhere. In the five years from 1901 to 1906, the establishments in New Zealand were reduced by twenty, the employees by six hundred, and the value of the output by £50,000. The total turnover of one hundred works now in existence is just below £2,000,000. Protection has not achieved what was expected for the leather industry. The operation of the Australian tariff has distinctly tended to set back the New Zealand industry towards the primary state. Between 1898 and 1907—covering the transition of Australia from Free Trade to Protection—the New Zealand exports of hides and skins, upon which little labour had been expended, increased by 250 per cent., while the exports of finished leather fell off to the extent of 50 per cent. Seven and a half million

skins were exported in 1907, but only 400 tons of leather.

The boot trade, which seems to be a necessity in almost every country, was in the lowest possible state at the commencement of the era of industrial arbitration. It seemed practically impossible to make the conditions satisfactory for the workers. Case after case was brought in the Court, and each time the cost of production was increased. In 1900 the minimum wage was 10½d. an hour : now it is a shilling. The export of boots is nil ; the importation has more than doubled during the last nine years. The number of operatives has increased since the inception of the arbitration law less than in any other industry : yet there has been such a shortage of skilled labour that employers have had time and again to override the protests of the labour councils and obtain skilled operatives, especially females, from England. Finally the employees, who have been reaping so many increases, are so far from satisfied that they talk of asking the Government to remove the protection from an industry which cannot give them better conditions. The duties on boots were again raised in 1907, and the workers applied to the Court for increases which amounted to one-third of the increase in the tariff.

“Your claim,” remarked the President of the Court, “means an increase of 33½ per cent. You base that increase on the benefit the trade has received owing to the increased duty?”

“Yes,” replied the representative of the operatives, “the employers are benefiting to the extent of £70,000, and we ask for £20,000 of it.”

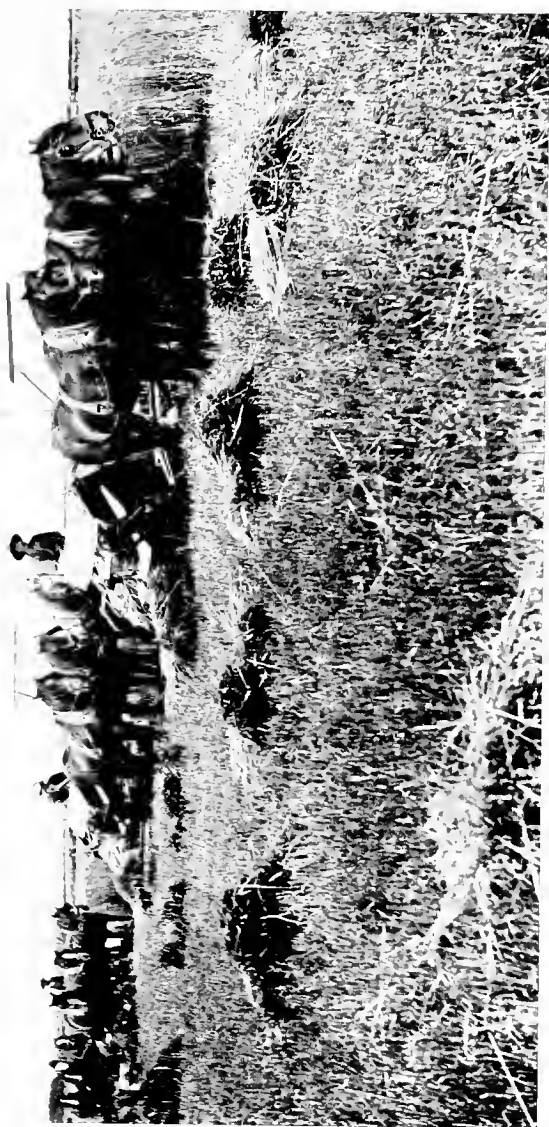
In bringing this case—the sixth in a period of thirteen years—the boot operatives’ unions placed great reliance upon the reasons given by the Arbitration Court in New South Wales in connection with an engineering case in 1908. On the basis of an increase in the duty amounting to 7½ per cent., the Court there granted an increase of wages to the men of 2½ per cent., and held that 4 per cent. belonged to the employers. The New Zealand

Arbitration Court in its award in the case under notice (June 19, 1909) declined to endorse this line of policy, since the duties collected were not paid into the pockets of the employers, who derived only an indirect and unascertainable benefit from them. Actuarial reports showed that the adjustment of the tariff in 1907 had increased the duties on men's boots by 8 per cent., on women's by 9 per cent., and on children's by $8\frac{3}{4}$ per cent. As a consequence, there was a considerable decrease in the importations; but the Court did not feel that this fact justified it in granting the men the increases they asked, since it was no guide as to the increase in the manufacturers' profits. The men asked for 1s. 2d. and 1s. 1d. per hour for the different classes of operatives. The Court fixed the scale at 1s. 0 $\frac{1}{2}$ d. and 1s. per hour respectively, but made it clear that such increases as it awarded were not at all due to the tariff increases. They were based on an offer made by the employers, and were given because the evidence showed that the boot-manufacturing trade was in a better condition than before.

A singular feature of this case was the fact that while the men were paid by the hour and asked for an increase of wages, they also wished the hours of work to be shortened. The Court remarked: "The favourite demand of unions whose members are working on a weekly wage for increased wages and reduced hours, is at any rate intelligible—they want more money for less work. But the demand in the present case is quite incomprehensible. So far from the hours of work being shortened they should be restored to forty-eight as originally fixed by this Court, so as to enable the workers to increase their earnings."

This is apparently a case in which Protection must be carried to an extreme point to maintain an industry in a market which is not large enough for successful specialising. In Australia the market is larger and the duties are higher, conditions being better all round.

Whatever the ultimate result will be of the dual in-



HARVESTERS AT WORK.

fluence of Protection and Arbitration, we cannot for the present see cause for misgiving as to the growth of industries and trade. This growth during the period covered by these great social experiments is almost phenomenal, as the following skeleton table will show :—

				No. of Factories.	No. of Workers.
1895	...	...	...	4,109	29,879
1899	...	...	...	6,286	45,305
1903	...	...	...	7,675	59,047
1908	...	...	...	11,586	78,625
Increase in 14 years				181·9 per cent.	163·1 per cent.

In the employment of individual industries we find this evidence of expansion :—

				1895.	1908.
Sawmilling, &c.	...	...	...	2,627	8,824
Tailoring, &c.	...	...	...	3,214	7,064
Dressmaking, &c.	...	...	...	2,563	6,182
Meat preserving, and tanning				2,752	5,058
Engineering	...	...	...	1,240	4,387
Coachbuilding	...	...	...	1,739	4,082
Baking	...	...	...	1,380	3,686
Printing	...	...	...	2,289	3,608
Flaxmilling	...	...	...	1,262	3,541
Bootmaking	...	...	...	2,568	3,168
Cabinet-making	...	...	...	718	2,623
Plumbing, &c.	...	...	...	709	2,224
Woollen milling	...	...	...	1,039	1,624
Butter- and cheese-making	...	...	...	231	1,581
Laundries	...	...	...	209	1,519
Brick and pottery works	...	...	...	293	1,340
Saddle- and harness-making	...	...	...	486	1,126

We have already seen the extraordinary growth of the primary industries in the same period. In the inclusive period of ten years, 1897 to 1907, the exports doubled, and less than 1 per cent. of the twenty million pounds by which they were represented in 1907 was derived from other than primary industries.

The feeling of the whole of Australasia towards local

industries is well summed up in this extract from a recent commercial report :—¹

“The Governments and the people of the Commonwealth and Dominion are determined to have factories of their own. They now have in operation highly protective tariffs, which, while giving a preference to British goods, will effectively encourage local industries. In addition to tariff support contracts are constantly being placed with local manufacturers at prices over 10 per cent. higher than those which they would have to pay for imported goods. There is a determination to become more self-supporting by creating and maintaining industries.”

¹ Mr. B. H. Morgan's report to the British Manufacturers' Association, 1908.

CHAPTER XXI

SHIPPING AND TRADE

The last of the sailing ship—Rapid development of steam shipping—A single route—Need for new markets—The Eastern trade, nil—Government subsidies for new markets—Lack of competition—Shipping rings—Two New Zealand companies—Development of the trade—The mercantile marine—Union Steamship Company—A national institution—The “mosquito” fleet—The colonial seaman—A wealth of ports—River ports and roadsteads—Artificial harbours—Natural havens—Harbours of the future—The leading ports—Expansion of the North Island.

NEW ZEALAND'S geographical position has always rendered her absolutely dependent for her prosperity upon her right-of-way on the ocean and the efficiency of her shipping communications. In both she has, on the whole, been extremely fortunate. In the early days the traffic was all one way, and there was never any difficulty in securing a smart clipper to carry to these far corners of the earth a remunerative company of emigrants and a bottom full of merchandise, and to bring back the semipiternal golden fleece of the pastures under the Southern Cross. That was a simple and primitive traffic, untrammelled by freight-cutting, or the insidious restrictions of the “conference” or the “ring.”

Up to 1880 New Zealand, with her local services of sail and steam, was well provided for as a self-contained community, but poorly indeed as a producer of foodstuffs 13,000 miles distant from its markets. This disability the refrigerator transformed with a magic touch. Colonial and British capital rushed into the breach to lie in wait for the prospective profits of this new and vast trade.

Steamers with refrigerated chambers commenced to run : at first modestly once a month. The produce of mutton grew apace. Butter and cheese, too, could be kept in condition for the journey. And all the time the sellers of the golden fleece gradually and quietly turned the cold shoulder upon the "windjammers"—the beautiful, romantic clippers of the fifties, the sixties, and the seventies—and stowed their bales, hard dumped, in the crowded holds of the greedy, aggressive steamers. The bursting, tremendous resources of New Zealand gave more and more. The wool and meat and butter doubled and redoubled and tripled itself yet again. The carrying trade grew and grew. The old-fashioned sailer—the latest of her class, with an appetite for 13,000 carcasses of mutton—fainted away before the glutton tramp steamer, which would absorb 50,000. And the tramp steamer in turn paled into insignificance before the great luxurious liner which carried 500 passengers above in the joy of life and 150,000 sheep in the frozen clutches of death below. It was wonderful.

Two companies diverted their whole carrying facilities—140,000 tons—into the New Zealand trade exclusively, and still had to build. Ten years ago travelling colonials returned wide-eyed to their townships to tell of the ocean mammoths—the *Ionic* (4,753 tons) and the *Tongariro* (4,163 tons). Now the *Ionic* is 12,234 tons and the *Tongariro* 10,192. The tonnage of these two companies alone is 247,000 tons, and there are two other powerful combinations carrying between New Zealand and England. The clearances oversea from New Zealand ports amount to 25,000 tons for every week in the year.

So much is good.

On the other hand there are very real disadvantages, both to the Dominion and the Old Country, in the centralisation of trade in practically one market. Year in and year out, through the long infancy of the colony, every keel has clove straight to and from the Thames. Wool, butter, and meat went in a continuous stream.



TIMBER SCOWS AT THE AOROA MILLS ON THE WAIROA RIVER.

Passengers looked neither to the right nor to the left. Ship after ship left its white wake in a clearly-defined ocean lane. For the time it was good, since London was more than able to absorb all that the colony could produce. But gradually in the last decade New Zealand has been vigorously attacked in her best markets by competitors who have brought more to London than London can consume. Victoria and New South Wales and Queensland profited by the experience of New Zealand, and sent Home mutton and lamb of excellent quality. Australia as a whole took time by the forelock, made profit in the early spring of a more northerly latitude, and landed sweet, tender lamb in the Thames-side stores while yet the cross-breds of New Zealand were shivering in the lee of the manuka and the tussac. Australian butter of the new season sweated in the English stores while the dairy cows were still browsing, pregnant and unhoused, in the Manawatu and Taranaki. Carcases from the Argentine sweltered gaily in the noonday sun at Smithfield while their New Zealand cousins, slaughtered at the same date, were still cleaving their way through the blue waters round Cape Horn.

As a final consideration, the organisation of the American meat-packers fed the illimitable produce of America to the necessities of the market, a carcase here and a truck-load there, all over the provinces of England. Each of these circumstances constituted an attack on the envied position of New Zealand, and most of them a reduction of profits, requiring some counter-vailing economy in freight or marketing, some decentralisation or concession to the convenience of the retailers, to maintain the position. It was here that the shipping facilities rather failed. The steamers required an extra knot or two of speed to make up some of the leeway as compared with the Argentine and Australia. Many of them, on the contrary, were slower than the boats of the rival countries. New Zealand began to appreciate the disadvantages of having built up a hard-and-fast connection, without the elements of elasticity necessary to meet

the new requirements of competition. New Zealand has all her eggs in one basket. There is not a single line of steamers carrying cargo regularly elsewhere than to London and the West of England ports, and the latter service is as yet far from efficient. No steamers run to New Zealand by way of Suez, and none of the eastern lines to the south proceed farther than the Australian ports.

Twenty years ago New Zealand was endeavouring to open up a market for her products in India, China, and Japan. The efforts came to nought chiefly because there was no steamship line connecting with the Far Eastern ports. Though the State operation of steamship lines had once or twice been mooted, the colony could not afford to subsidise lines to run specially in the interests of a prospective trade. Australia, on the other hand, entering the field in earnest ten years later, had the advantage of several lines of steamers running to and from the East and through the Suez Canal. And to-day Australia has vast interests, in markets for her produce, throughout India, Ceylon, the Straits, China, and Japan. New Zealand was the first to test the openings, and is equally able to meet the demand, but the lack of any shipping communications has killed her chances. The exports from New Zealand to the whole of the East in 1907 were worth only £130,000, and out of this Ceylon took 90 per cent. Even amongst the scattered Pacific Islands New Zealand has a better trade than this.

The efforts of the Government to open up new markets form rather an interesting study. The companies refused to go out of the beaten tracks, and the colony was unable to grant sufficient subsidies to encourage them to do so. The service to Vancouver, British Columbia, maintained for many years as a mail connection, did not lead to much trade because the Canadian manufactures were chiefly on the Atlantic seaboard. For the same reason the service to San Francisco has never amounted to much. The ships that were necessary in any case to carry the American manufacturers from the Atlantic seaboard to New Zealand were utilised

to take back *kauri* gum, sheepskins, wool, and hemp, although the transit was unconscionably longer. The only regular exports from the Pacific slope to New Zealand are the detested Oregon pine and, strangely enough—fruit.

Then there is the trade with Japan. In spite of a heavy duty Japan sends down each year nearly £100,000 worth of silks, manures, and fancy goods, against which it takes a bagatelle of a few thousand pounds' worth of goods, carried by way of Australia in Japanese ships. Before the Boer War the South African trade was worth exactly three thousand pounds a year. Oats and provisions for the troops meant £825,000 for New Zealand in a single year, and the Government then subsidised a steam service to develop the trade. It found its level, after the war, in a market for less than £100,000 worth of New Zealand produce, and this with the aid of a reciprocal tariff. Finally there is the West of England trade. The creation of new tastes and civilised requirements amongst the swarming populations of Eastern Asia is scarcely proving more difficult than the mere diversion of portion of the British import trade from London to other centres of consumption—Bristol, Manchester, and Liverpool. With the Americans the organisation of selling and the control of shipping are an accomplishment. Of themselves they enable the producers of America to compete with those of the British Empire, even when the quality is inferior. New Zealand, on the other hand, has suffered from a lack of competition in shipping. It is controlled in such a way that modifications to meet new conditions are difficult of achievement, and any move to meet the opposition of the American operators is tardy.

From the British point of view, too, shipping conditions are far from satisfactory. A Royal Commission and a Trade Commissioner have recently come to the conclusion, from independent investigation, that the "ring" shipping companies which figure in the Australasian trade are largely responsible for the increase of

to the modest profits of the home trade. Then, purchasing the business of McMeckan, Blackwood & Co., of Melbourne, it embarked boldly in intercolonial waters. The business and the fleet grew rapidly and steadily. In every colonial port the red funnel of the Company became the most familiar shipping sign. On the eastern seaboard of Australia, 1,200 miles away, the steamers plied regularly. Tasmania became the Company's preserve. Ocean routes were struck: to the Islands of the Blest in the Pacific, right up to Vancouver with mails, and finally through the Eastern Archipelago to India. No equipment was too modern, no improvement too radical for the shrewd Scots shipowners. Every year at least one new steamer emerges from an approved Scots yard (generally Denny's, of Dumbarton) to go into service with the red funnel.

Turbine-propelled screws were churning the waters of the Tasman Sea while people in England were still wondering whether they were successful. To-day the Union Steamship Company possesses sixty-five vessels of an aggregate tonnage of 157,000 tons, and the crews, numbering about three thousand men, comprise only 5 per cent of foreigners, a healthy contrast to a casual British crew. The Company also operates a sea-going training ship for the training of its cadet officers. To New Zealanders the Union Steamship Company is the embodiment of their maritime aspirations. Every year of its success is a matter of national pride.

Another Company, the Northern, works the northern ports of the Dominion on much the same lines, but on a more modest scale; while the numerous navigable rivers and indentations of the coast give remunerative investment to half-a-dozen companies owning small light-draught steamers, which do invaluable service as the feeders of the oversea ports. The "mosquito" fleet of New Zealand is a source of astonished interest to visitors. Including the vessels of the Union Steamship Company (many of which are of heavy tonnage), there are on the register of the Dominion 305 steamers of an



EFFECT OF A HEAVY SEA AT TIMARU BEFORE THE HARBOUR IMPROVEMENTS.

average tonnage of 500 tons, and 323 sailing vessels of an average of 150 tons. In point of numbers more than half of the total shipping is registered at Auckland, upon which converges the seaborne trade of countless bays, islands, and navigable rivers and of the Pacific islands. As we have seen elsewhere, small shipbuilding establishments have existed since the earliest days, and even to-day brigs, schooners, cutters and a special type of "scow" designed for the timber trade of the North and of the Marlborough Sounds take a prominent place amongst the coastal shipping of the Dominion.

Seamen in New Zealand waters are the object of such paternal solicitude that it is never difficult to get the best class of men for the mercantile marine. The Shipping and Seamen Act of 1903 provides in the most generous manner for the comfort and health of the mariner, and also for the due manning of ships according to their tonnage. Seamen also come within the cognisance of the Arbitration Court, which has managed, not without some difficulty, to make their conditions of work and pay, and even the hours of labour, correspond somewhat with those of the worker on land. The eight hours' day is practically an established principle on the decks of vessels trading in New Zealand territorial waters.

Some of these restrictions would fall heavily on the owners of ships manned by the riff-raff which is so often found in British forecastles. They press less heavily on the colonial owner because the conditions all round are so much better that a better class of men finds it worth while to go to sea, and the working of colonial ships is much less likely to be interrupted by desertion or drunkenness on the part of the seamen. The sobriety of the colonial seamen is proverbial in New Zealand. It was at one time feared, in the initial stages of this legislation, that owners might transfer their registration to other flags; but the Commonwealth has now adopted somewhat similar provisions for the welfare of seamen,

and the movement has gradually affected some of the British owners of oversea traders.¹

The mercantile marine is one of New Zealand's most respectable industries, and of it, too, it can be said that its development is in no measure due to "coddling" by the State. The shipping interest had its birth in colonial capital; it thrived on the natural necessity for its services, and established itself in small beginnings before the field seemed to be worthy of exploitation by outside capitalists. There is not the smallest suspicion of State feeding about such an enterprise as that of the Union Steamship Company. State activity has been all in the opposite direction, increasing expenditure by the imposition of restrictions and regulations.

But the service is already, in the class of vessels employed and the standard of its seamen, feeling the good results of State regulation judiciously applied. The fact that the Commonwealth, the only other great ship-owning State south of the line, has adopted maritime laws closely following those of New Zealand removes the probability that New Zealand may be handicapped in competition in the carrying trade—as she undoubtedly is in the market for manufactures by the increased cost of services.

As the New Zealand companies are now situated, it is morally certain that the Dominion must take a position in the carrying trade of the Pacific similar to that occupied by England in the world at large. Aided by vast supplies of fine coal, and later, no doubt, by the huge deposits of iron which lie on the surface close to deep water, the shipping industry of New Zealand is bound to expand. For that expansion every harbour in the country is extending its facilities. There is no class of vessel afloat which cannot find safe haven at half a dozen ports. Numberless river estuaries receive schooners and cutters on the flood and leave them at the ebb to discharge their cargoes on the dry sand. That is the service of the out-

¹ The Navigation Conference in London, in 1907, was the outcome of this legislation.

lying settlers, the men who graze sheep and cattle on the new sections and draft them to the downs and the plains to be fattened off close to the freezing works. It is the most primitive service of all, unless we except the surf boats that float the wool from the East Coast stations out to the "mosquito" steamers lying off.

Slightly better than the river estuaries are the bar rivers, which will take steamers of light tonnage on the crest of the tide in to the riverside wharves, with the freezing chambers and warehouses alongside. Patea, Wairau, and Hokitika are examples—modest little ports that rarely see a large steamer—but the annual trade of the three is nearly a million pounds. Each has a Harbour Board with certain powers and great ambition, and the little "mosquito" flotilla plies constantly from such havens carrying meat, and butter, and cheese, and wool, to load overside into the ocean liners at the deep-sea ports. The Government, not the least embittered at this so serious opposition to its own railways, makes a liberal vote every year to aid the pilotage, lighting, "snagging," and similar little services of these and smaller ports.

On the West Coast of the South Island are several fine examples of improved river ports at the mouths of the treacherous Grey and Buller. The coal trade of New Zealand could never have developed if it had remained dependent on the possibilities of these bar-bound ports. A quarter of a century ago the Westport bar showed only 8 or 10 feet of water, and it was impossible for vessels of any considerable tonnage to pass through. Regarding it as essential that the best coal seams should be made available, the Government consulted Sir John Coode, and adopted a scheme of improvement which has been so steadily successful that to-day there is a depth of 20 to 24 feet on the bar, and full-laden steamers can clear direct for sea instead of having to fill up from hulks in the deeper water of Port Nicholson. The port is now worked each year by more than a million tons of shipping. Its improvement, which is of immense strategical value for naval purposes, still proceeds vigor-

ously. The history of Greymouth, which lies fifty miles to the south along the surf-beaten coast, is much the same. There, too, the depth on the bar has been increased from 10 to 20 feet, and the output of coal and timber accordingly. At both ports the construction of tidal floating basins is contemplated.

Then there is another class of inferior port—the open roadstead. Whanganui and Gisborne, for example, have inner harbours on the rivers for small craft, but the ocean trade, which is three-quarters of a million at Whanganui, and more than a million at Gisborne, is for the most part negotiated by lightering to large vessels lying in the roads. Napier, too, with an oversea trade of nearly two millions, relies largely upon the same methods. But the meat and dairy produce which are so loaded are handled with the tenderest care. The farmers, directors of their own companies, are close at hand to watch their interests, and there would be serious trouble if the precious carcase or butter box was subjected to the risks of injury and contamination which are all too prevalent at the London end of the journey. Practically every harbour which has control of an open roadstead is improving it. Some have done excellently well already. Timaru commenced nearly forty years ago to work on a scheme suggested by Sir John Coode, and now, instead of the open road, there is a fine artificial harbour, the best in the Dominion, receiving 400,000 tons of shipping in the year and negotiating nearly two million pounds worth of trade. At a single time the harbour has accommodated eight large vessels of an aggregate tonnage of 28,960 tons. In the ten years 1897 to 1907 the trade of Timaru increased by 138 per cent., creating a record of expansion amongst the ports of New Zealand. Oamaru, a few miles to the southward on the same surf-beaten coast, represents an attempt to get over much the same difficulties by different—and, as it happened, much less successful—methods. But the open road for which the greatest future is expected is undoubtedly that of Gisborne, the indentation which Cook so unsuitably



OCEAN-GOING STEAMERS LYING IN THE ARTIFICIAL HARBOUR AT TIMARU.



OCEAN-GOING COLLIER INSIDE THE IMPROVED BAR HARBOUR AT WESTPORT.

designated Poverty Bay. Time has proved it exactly the antithesis. In spite of the long dark cloud of the Maori wars, which retarded settlement for twenty years, white men have simply swarmed into the hinterland of Poverty Bay to turn the rich, black plains to account and depasture hundreds of thousands of sheep and cattle on the once thickly wooded hills. Every year thousands of acres of this rich *papa* soil are brought into fruition. There are already two million sheep and 130,000 cattle in the hinterland, to which a railway is just now slowly creeping from the port of Gisborne. Here, nestling about a shallow tidal river, a haven for only the smallest vessels, lies a fine town of six thousand inhabitants, one of the wealthiest in New Zealand, whose trade, over a million a year, passes principally through the primitive medium of the lighter to the ocean-going steamers in the bay. The prospect of Poverty Bay, when the present well-advised harbour scheme is carried out, is one of the brightest.

Having said so much of the inferior and medium ports of the Dominion, there is nothing but admiration to be expressed for those great natural harbours through which the trade chiefly passes. In the North the 10,000-ton steamer sails straight in, day or night, to the deep-water wharves right alongside the streets of Auckland. The Waitemata Harbour can with the greatest security accommodate a battle fleet of the present day, and has done so for demonstration.¹ There are other splendid natural harbours north of Auckland—the Bay of Islands in particular—but a ruthless political policy tore away the capital from its seat there, and now the Auckland trade is well and sufficiently carried by the “mosquito” fleet to the ocean port of Waitemata. Several of the North Auckland rivers, too, are navigable for long distances, and out of them is a direct oversea trade in timber.

Auckland is perhaps the most comprehensive and cosmopolitan port in New Zealand, though Wellington receives most of the direct deep-sea trade. In the

¹ The United States battle fleet, which circumnavigated the world in 1908, anchored for a week in the harbour of Waitemata.

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splendid landlocked expanse of Port Nicholson, too, a battle fleet could manœuvre with perfect safety and freedom. The entrance is deep and well buttressed by walls of rock which break the Antarctic swell and make the harbour negotiable in all weathers by all classes of vessels. In its character Wellington is a natural emporium, a distributing centre for imports and a collecting base for the exports of a vast area. The coastal routes of the two islands converge here as naturally as the eastern waterways at Singapore. The wharfage and equipment are admittedly the best in the Southern Hemisphere, and superior to many of the great ports of the Old World. They are being added to now by the construction of a graving dock 651 feet in length on the floor. The third of the great natural harbours is Lyttelton, a crateral depression which has been turned by Nature to the best account. The fourth, Dunedin, has rather fallen from grace of late. That is to say, the channel of the upper harbour, upon which the city stands, is only kept clear by constant dredging. At Port Chalmers, near the mouth of the harbour, is a good deep-water harbour.

The trade figures of these four ports for the year 1907 stand as follows :—

		Imports.	Exports.	Total.
		£	£	£
Wellington	... ..	5,248,835	3,919,002	9,167,837
Auckland	... ..	4,533,999	3,472,405	8,006,404
Lyttelton	... ..	2,633,244	2,836,739	5,469,983
Dunedin	... ..	2,489,126	1,538,415	4,027,541

Elsewhere there are two splendid natural harbours, Akaroa and Picton. The latter is already assuming some importance, but the former is so placed geographically that it will never be of prime value from a commercial point of view.

The almost phenomenal rise of the North Island ports during the last twenty years is a result of the long delayed but now tremendous expansion of settlement and production in that portion of the Dominion.

Ten years ago the trade was almost evenly divided between the two islands. To-day 60 per cent. of the exports are from the North, and there are still vast tracts of country undeveloped. In that period of ten years, too, the total trade of New Zealand has doubled itself.

CHAPTER XXII

INTERCHANGE AND MARKETS

A British trade connection—When the State was young—The balance of exchange—The imports—The All-Red sentiment—A single selling market—Everything goes to England—The exports analysed.

THERE is no mercantile house in the world which possesses a closer and more cordial understanding with its Antipodean representatives than England with New Zealand. England is the principal customer for the products of New Zealand ; she is, in fact, practically the only purchaser, as things are conducted, of the whole exportable surplus of the primary industries. New Zealand, on the other hand, makes two-thirds of her oversea purchases in England, one-fourth in other British possessions, and less than one-seventh with foreign nations, amongst whom the great English-speaking republic looms large.

In the early days of New Zealand's history practically everything that was required had to be imported, and until twenty years ago the imports far outweighed the exports of raw produce. This was, of course, particularly noticeable in the boom days of the gold-fields and the Vogel policy. A mere money comparison is misleading, but it would be no exaggeration to measure the extravagance of the Vogel era, 1870-9, by the figures for that decade. The imports succeeded the exports by £13,600,000, and £16,000,000 was added to the National Debt. They were haphazard days indeed, and it took much economy and sadness to recover the balance. Throughout the eighties both State and public practised

the most rigid economy. The exports averaged about six and a half million pounds a year, and in 1887 they again exceeded the imports in value. This position (only twice before achieved, and for a single year at a time) was maintained continuously for twenty-one years, and in the ten years ending with 1907, the exports from New Zealand exceeded the imports by 22 million pounds. Last year a chain of circumstances effected a sudden reversal: the shrunken exports fell about two million pounds below the value of the imports. But that is a temporary lapse which has already been in part adjusted by an excellent season and cautious purchasing.

In respect to its business houses and its lines of communication New Zealand is essentially a British community. With the exception of the freight steamers running to the Atlantic seaboard of America, and an occasional precarious mail service to San Francisco, there is not a single regular line of communication to a foreign port. The following table (taking 1907 as a normal year instead of 1908) discloses the thoroughly British character of the import trade :—

				Imports from United Kingdom. £	Imports from British Possessions. £	Imports from Foreign Countries. £
1892	...	...	...	4,769,369	1,619,590	556,097
1898	...	...	...	5,148,833	1,927,817	1,153,950
1907	...	...	...	10,278,019	4,664,164	2,360,678

Or, to make the comparison and the tendency more apparent :—

				United Kingdom. Per Cent.	British Possessions. Per Cent.	Foreign Countries. Per Cent.
1892	...	...	...	68·66	23·32	8·02
1898	...	...	...	62·56	23·42	14·02
1907	...	...	...	59·40	26·96	13·64

The tendency at present is for New Zealand to take an even greater proportion of British goods, but it has to be remembered that nearly a million pounds' worth of goods imported from England are the product of foreign countries so shipped to benefit by the preferential tariff.

Of the purchases actually declared on arrival as foreign fully one-half come from the United States. Although New Zealand is comparatively close to the United States, and in spite of the fact that for years past there has been a mail service to San Francisco, the geographical distribution of industries in the United States is such that nine-tenths of New Zealand's imports come from the Atlantic seaboard. The shipping facilities are so good that merchandise from New York to New Zealand is carried cheaper in the same bottoms than similar goods picked up at London, *en route*.

Tobacco and kerosene, neither of which competes to any extent with British productions, bulk largely in the total, but fully one-fourth of the American imports consist of iron and steel ware and electrical machinery. Cotton piece goods, boots and shoes, and leather, are also able to jump the hurdle which is interposed to foreign imports by a Parliament friendly to the All-Red sentiment. While the overpowering industries of America are thus able to butt their way over obstacles, the favoured Canadian manufacturers are baulked by deficient or hostile shipping facilities and only give New Zealand about £150,000 worth of their goods each year.

The only other considerable foreign competitor is Germany. The Germans, who are also favoured by shipping facilities, are able to pay freights, duties, and preferential surcharges on 70 per cent. of the imports (valued in 1907 at £351,634) which they send to New Zealand. Musical instruments, manures, fancy goods, toys, and glass ware are the principal products for which Germany finds a market in the Dominion.

English imports include the whole gamut of iron and steel ware and machinery, and every class of clothing. Nearly a million pounds of woollen goods are imported to offset the exports of raw material. Amongst the imports from British oversea dominions tea and sugar loom very large.

Simple as is this purchasing field, New Zealand's markets for exports are even less complicated. If any



PORTION OF THE SEA-FRONT, WELLINGTON, THE CHIEF OVERSEA PORT OF THE DOMINION.

man was inclined to accept the suggestion that the over-sea States were looking for a chance to "cut the painter," he would find the most pronounced refutation in a study of trade statistics. Sentiment has never yet been found to run counter to commercial expediency, and it is difficult to conceive a sentiment which could sever the relations of great producing countries and their principal markets. In spite of the steady growth of manufactures in the Dominion, New Zealand is essentially dependent on its primary products. In 1907 manufactures amounted to only 1·22 per cent. of the total exports of twenty million pounds. The whole of the seaborne wealth of the Dominion, we may say, was foodstuffs and products of the soil in a more or less crude state. And not one-twentieth of the whole went outside the British Empire. Ten years ago the leakage was slightly more.

New Zealand keels have always run in British waters. Four-fifths of the seaborne harvest of the Dominion—the produce of farm, mine, station, and forest—goes direct into the docks of London, Manchester, Liverpool, and Bristol. One-eighth, carried in New Zealand owned steamers, goes in barter to the sister States of Australia and the British islands of the Pacific; and the fugitive residue, less than a million, is returned to foreign countries (four-fifths of it to the United States). There is only a single shipping line running to New Zealand that is not British. It is owned by an American company which exchanges about two million pounds' worth of goods each year between the Dominion and the English-speaking republic, and incidentally gives excellent terms to German merchandise.

The trade relationship of New Zealand and Great Britain is the natural alliance of the manufacturer and the producer of raw material. Before the refrigerator revolutionised the producing industries of New Zealand, politicians were at their wits' end to find markets for New Zealand products. India could not eat our meat. Japan would not use wool. China had no desire for rancid butter. Australia had all that New Zealand

possessed, and more. Except in a drought season England was the only country which wanted the products of New Zealand. Long before the United States had become a great manufacturing country, Great Britain had centralised the wool trade of the world. All the ocean tracks led to the Thames. Since then New Zealand has developed a few new zones of trade—in Australia and in the Pacific—but they are all British. There is, for example, an interesting little item of £38,000 to the Cook Islands. This includes almost everything that a somewhat tropical archipelago with ambitious ideas may want to import. New Zealand supplies the foodstuffs and timber from her own fields and forests, and the balance is made up of manufactures, collected chiefly from Europe and England, and re-exported. To all intents and purposes New Zealand is the absolute trade terminal port. Practically every steamer that enters clears to the garboard streak in the ports of the Dominion, and fills up again from the granaries, the freezing chambers, and the wool stores. A quarter of a million pounds would cover the whole of the merchandise received for re-export.

Following is an analysis of the exports of New Zealand in a normal year (1907) :—

	Value.	Percentage of Total.
Wool	£7,657,278	38·70
Meat	3,520,877	17·80
Mines	2,344,903	11·85
Dairy produce	2,277,700	11·52
Animal by-products	1,787,873	9·03
Hemp	832,068	4·20
<i>Kauri</i> gum	579,888	2·93
Forests	324,598	1·65
Manufactures	241,634	1·22
Grain and roots	162,967	0·82
Miscellaneous	29,746	0·16
Fisheries	23,606	0·12
Total domestic products ...	£19,783,138	100·00

In the ten years 1897 to 1907 the trade of the

Dominion doubled. Its development is shown in this table :—

			Value of Exports. £	Value of Imports. £	Value of Total trade. £
1857	...	...	369,394	992,994	1,362,388
1867	...	...	4,479,464	5,344,607	9,824,071
1877	...	...	6,058,717	6,973,418	13,032,135
1887	...	...	6,866,169	6,245,515	13,111,684
1897	...	...	10,016,993	8,055,223	18,072,216
1905	...	...	15,655,947	12,828,857	28,484,804
1907	...	...	20,068,957	17,302,861	37,371,818

CHAPTER XXIII

PROTECTION AND MONOPOLIES

Tariff adjustment—The old revenue tariff—Free Trade standards abandoned—Surreptitious Protection and tariff trimming—New Zealand converted to Protection—Protectionist farmers—Retaliation against Australia—Preferential trade—A patriotic arrangement—Reciprocity—Fostering local employment—Protection a vital force—Local industries transformed into monopolies—Popular feeling against combines—Movement against a trust—Protecting the agricultural implement trade—Not proven—Prices fixed by gazette—The flourmillers' trust.

THE tariff arrangements of New Zealand show just as cheerful a disregard of accepted economic principles as the labour and land laws. And the different grades of society are just as original in their attitude towards this question as they are unconventional in their general politics. In the primeval days of the self-governing colony the customs were used entirely to obtain revenue for the purposes of a very expensive governmental system. By and by the sale of land became a prime producer, but this fell off perforce, and before long the Colonial Treasurer looked with purposeful eyes upon the custom house. In 1873 the people of New Zealand were paying more than £3 a head in customs and excise duties, but little had been done by this means to protect local industries. In fact, a tariff that mulcted spirits in 12s. a gallon, tea in 6d. a pound, and sugar in 1d. a pound could only be regarded as a revenue one pure and simple. The sugar duty, which a straitened Treasurer at the close of the seventies desired to increase, began to look slightly more benign in the early eighties,

when a bonus of $\frac{1}{2}$ d. a pound was offered for the first thousand tons of beet sugar produced in the colony. This coincided with the serious inception of industrialism in the colony, and there were not wanting voices now to clamour for protection against the dumping of American and German stocks.

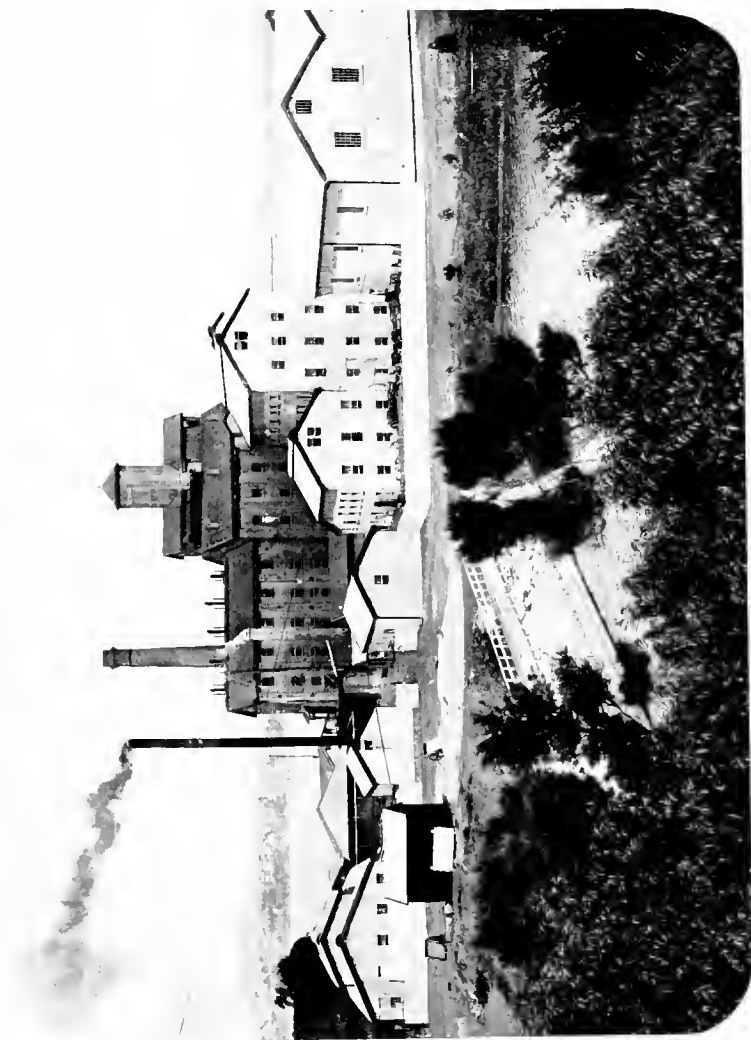
Since the glories of the Vogel policy had passed away engineering industries had commenced to languish because the other pursuits upon which it lived were starved for capital. The clothing and boot and shoe trades, on the other hand, were languishing purely on account of the competition of cheap foreign articles. The last Conservative Government was compelled to yield some measure of protection to the popular clamour, but it could not afford to forego its revenue from the customs, so it compromised by raising the tea duty to 6d. Thence onward the specifics adopted to meet the industrial revolution made the protection of local industries the first line of defence. Year by year the barriers against articles which New Zealand could produce, or which politicians thought it should produce, were raised; and steadily, under the dual influence of Protection and the State regulation of industrial relations, the prices were raised to the consumer. We have seen elsewhere how labour fluctuations affected prices, and how the third agent—a sleeping partner—levied heavy toll on the workers. Nor was capital itself entirely guiltless of preying upon the dwellers within the ring fence. In certain localities it was admitted a few years ago that the sawmilling industry was over-capitalised to such an extent that it had to charge exorbitant prices to earn interest. And that being so, the Government refused to put a duty on Oregon pine, which was flooding the market. More or less substantial charges have been made from time to time against the agricultural implement-makers, the flourmillers, the oil merchants, and others. The evidence on these occasions demonstrated very clearly the great danger of local industries being transformed into noxious trusts by the

protection of a tariff, and the present Government has declared its intention of nipping in the bud any attempt on the part of local traders and merchants to palm off on to the consumer the increased price which Protection renders it possible to charge.

The original tariffs were guiltless of either Free Trade or Protection. Yet clandestinely some industries grew up under them. The beer duty was always an excellent thing for the colonial exchequer and likewise for colonial breweries, of which there are now more than two dozen, turning out more than half a million pounds' worth of excellent ale every year. New Zealand consumes more than nine million gallons of beer yearly, but only a quarter of a million comes from abroad. Then there is sugar. Long before Sir George Grey talked of a free breakfast-table, sugar and molasses paid a modest penny a pound to the customs on landing. Under this surreptitious protection a local refining industry grew up, and now scarcely one-fiftieth of the sugar that is used in the Dominion comes in in the refined state. The sugar duty was first reduced to $\frac{1}{2}$ d. and then (1907) removed altogether; and the price has fallen steadily from 5d. in 1858 to $3\frac{1}{4}$ d. in 1888, and now to $2\frac{1}{2}$ d. and 3d., and there is a respectable export of 400 tons of sugar refined in the Dominion. This may be equally an argument for Protection in the early stages of an industry, or Free Trade in the later.

Observe, again, the effect of tariff trimming on the soap and candle industry, a reasonable activity for an agricultural country. With a duty of 2d. a pound on candles the industry thrived. The Free-Necessities party reduced the rate by one-half, and almost immediately five works closed down; imported candles swamped the market, and the output of the local works was reduced by one-third. Seven years of this persuaded the Government to raise the duties again, and the industry gradually revived. The output of the soap and candle works is valued at something less than £200,000 a year.

The gradual conversion of New Zealand to the Protec-



COLONIAL SUGAR REFINING COMPANY'S WORKS AT CHELSEA, AUCKLAND.

tionist view was assisted by very powerful collateral forces, and we have now the strange phenomenon of an agricultural country where the farmers are to some extent Protectionist. Let it not be supposed that strong vested interests produced the change. On the contrary, it has been steadily advanced by public opinion on the one hand and the necessities of the struggling infant industries on the other. In 1898, when the policy was much more moderate than it is to-day, and when the duties levied represented 24 per cent. of the declared value of the goods, Mr. Reeves wrote :—¹

“Nor would it be fair to regard the colony’s protection as simply a gigantic job managed by the more or less debasing influence of powerful companies and firms. It was adopted before such influences and interests were. It could not have come about, still less could it last, were there not an honest and widespread belief that without duties the variety of industries needful to make a civilised and prosperous nation could not be attained in young countries, where nascent enterprises are almost certain to be undercut and undersold by the giant capitalists and cheaper labour of the Old World.”

At that time Mr. Reeves thought it improbable that Protection in New Zealand would go farther on the road towards McKinleyism. It has, in point of fact, advanced considerably, but largely under the influence of a development which Mr. Reeves, for one, honestly did not anticipate. The New Zealand tariff is no longer a compromise, as it was then. It is a frank surrender to a desire for Protection which permeates the whole community. Each class, from its own point of view, feels it to be essential.

The farmers, who since 1900 have been most compactly organised, have year by year shown increasing frankness towards Protection. Though reiterating, as a plank of their platform, their belief that customs taxation should be for revenue purposes only, they have actually affirmed the principle of Protection on farm products as

¹ The “Long White Cloud.”

against countries which adopt the same policy. It is in reality a form of retaliation against Australia. There are duties on all sorts of grain, flour, bacon, potatoes, &c., and the farmers, as producers, have now affirmed that these should only be remitted by way of reciprocity. To these duties has been ascribed the restriction of wheat-growing during the past few years, though, as a matter of fact, it is chiefly due to the tariff barriers of Australia, which have destroyed a regular market for New Zealand's surplus supplies.

In 1903 the Seddon Government made an interesting original move in tariff adjustment, one of the earliest steps towards Imperial preference. The Preferential and Reciprocal Trade Act of that year was no great sacrifice for a principle. It did establish the principle of preferential trade within the Empire, but it did so by providing for a surtax on goods not produced within the Empire. By way of showing that New Zealand was prepared to give up something, the duty on tea—a twopenny remnant of the barbarous old sixpence still remained—was abolished if the tea was grown within the Empire. If not the 2d. was still charged. Hitherto China tea had been very widely used, and the step meant a sacrifice of about £40,000 in revenue. The following year, China tea alone being dutiable, it yielded a paltry £4,838, a figure which was decimated again in 1905. The imports from China have fallen away steadily to £3,000 a year, while British-grown tea from India and Ceylon have come into almost universal use.

Elsewhere the preferential duties have had a marked effect in diverting the foreign trade of New Zealand to British dominions. In 1906 the whole of the increase of trade (22 per cent.) was so secured. Previous to this preference Belgian bars could be placed in New Zealand cheaper than Scotch or North Country. The 20 per cent. barrier against the foreigner has completely altered the position,¹ though in such a case, needless to say, New Zealand pays for her patriotism. There are even more

¹ Report of the Board of Trade Commissioner, 1908.

striking cases of the desire of the people to have their business with communities of British nationality. The Wellington Harbour Board is one of the large public corporations which specifically invite tenders for large engineering contracts from selected firms in New Zealand, Australia, and England, and decline to consider the cheaper offers of foreign companies.

The following table is an interesting illustration of the trend of tariff incidence :—

MERCHANDISE.			
	1894	1898	1907
	£	£	£
Free	1,871,772	2,800,046	6,350,448
Dutiable	4,118,405	5,411,363	10,189,259
	<hr/>	<hr/>	<hr/>
	5,990,177	8,211,409	16,539,707
DUTY PER CENT.			
	1894	1898	1907
On dutiable imports ...	38·18	36·32	30·28
On all merchandise ...	26·25	23·94	18·65

The alterations of tariff were made in 1895, 1900, 1903, and 1907.

To-day the customs tariff of New Zealand combines as democratically as possible the principles of a free breakfast-table, high protection for local industries, and a preference for British goods, which does occasionally entail a sacrifice. Under the Act of 1903 the Government has power to enter into reciprocal relations with any other British dominions for the exchange of products under a reduced tariff so adjusted as to involve the parties in almost equal sacrifices. Such an agreement was entered into with the South African States in 1906. Another, drafted by Mr. Seddon just before his death, for reciprocity with the Australian Commonwealth, was received without enthusiasm in either country, and rejected. The sudden discovery that Australia and New Zealand were running neck and neck for first place in the production of certain foodstuffs has rather discour-

aged any further overtures. The farmers of New Zealand are no more anxious than those of Australia to see their home markets thrown open to the competition of outside products in those poor seasons which mean money to the producer.

The protective duties in New Zealand are the outcome of a genuine desire to encourage local industries. It is already one of the strongest indictments that can be brought against a Government that it has procured abroad what could be obtained within the Dominion; and this charge is often made with a cheerful disregard of the difference in cost of the article. It is not unusual for public bodies and companies in New Zealand to pay locally as much as 10 per cent. more for contracts and supplies than they would have to pay to a foreign contractor. In this case the extra payment is not altogether a concession to patriotism. Part of it is a fair consideration for the advantage of having the work done near at hand, promptly and without risk of mistakes. The tariff in regard to manufactures is so adjusted as to let articles down lightly, according to the amount of employment they are likely to give within the country. The tea duty, as an inconsiderable example, is lighter for bulk quantities than for tea put up in small packets ready for the market. Unmanufactured tobacco is 2s. the pound, cigarettes and cigars 7s. Textile piece-goods are 20 per cent., apparel made to order 40 per cent. Iron and other metals in the crude condition are allowed in free, because the vast iron deposits of New Zealand are not being operated, but all iron manufactures are weighted with imposts. The capitalising of a company to work the Parapara deposits would probably be followed closely by the imposition of duties on pig-, bar-, and sheet-iron. Quite recently the Minister of Railways had to reply to a charge of having imported engine rods, axle-boxes, and springs for a new locomotive for especially heavy haulage. His reply was that no such steel was obtainable in New Zealand, that the axle-boxes had only been sufficiently machined abroad to test their soundness, that the finishing work would be

done within the Dominion, and that the springs had only been imported on account of the pressure of work in New Zealand. Questions of this sort are of everyday occurrence.

Quite unconsciously Protection has become a vital force in New Zealand. Though it has a strong minority of opponents in principle, it has gradually become so interwoven with the prosperity of the country, that it could scarcely be repealed without something in the nature of a social calamity. Protection only exists for the sake of giving employment. Its best friends admit that it increases prices all round. If it were reversed to-day dozens of industries, large and small, would be absolutely and instantly ruined, and thousands of artisans and mechanics thrown out of work. Protection is as essential a part of the national policy as arbitration and closer settlement of the land, and it could not be abandoned now without very serious results. Whether the people will eventually seek some relief from the continuous enhancing of the cost of living, which is largely to be ascribed to the twin influences of Protection and Arbitration, remains to be seen.

Protection has developed in New Zealand along certain lines which would probably be impossible in countries differently situated. The sea moat by which the group is surrounded is in itself a very definite measure of protection. A tariff protection superadded to this means a much greater measure of protection for the local market than the same impost would mean in the case of England, Germany, America, or Canada. It means that no new competitor, unless exceptionally served by steamship lines, would enter into competition with the prospect at best of securing only a share of a very limited local market.

In a country so situated Protection tends dangerously to transform local industries, fostered by a strong patriotic feeling, into monopolies. The moment that healthy competition is eliminated the whole operation of Protection is dangerous. And in far-away, tiny New Zealand it

was eliminated very early in the day. The people were determined to have their own industries, and they have not been content with half-measures in protecting them from interference.

The struggle with incipient monopolies has not proceeded far enough to permit of any deductions of value. The principle of State interference with industries in the interests of the public became so thoroughly established in a period of ten years of quasi-Socialism that certain well-recognised trusts of long standing hesitated to exact more than a generously just profit from their New Zealand consumers. Long before any definite declaration was made by the Government the heads of these combines or trusts understood as well as the public did that Parliament in its democratic spirit stood inexorably between them and any extortionate profits, and they were generally content to reap reasonable returns from a wealthy and well-protected—if restricted—market.

The first decided move against a trust was made at the beginning of the century. A steady centralisation of the import trade in agricultural implements was followed by a systematic lowering of the prices of certain implements in direct menace to the local manufacturers. There was, and is, no duty on agricultural implements. The farmers did not want Protection, but neither the farmers nor the general public wished to see a foreign trust destroy a local industry and afterwards command its own prices.

The Government got over the difficulty by a compromise. In 1905 it passed an Act constituting a board to investigate any complaints of unfair competition in the agricultural implement trade. If the board, having received a complaint from two or three local manufacturers that the price of imported implements^{*} had been

^{*} Ploughs, harrows, drills, cultivators, rollers, chaff-cutters, and seed cleaners are the implements named in the Act. Harvesters (locally called reaper and binders) were not included, for the simple reason that they were protected by a foreign patent in New Zealand and could not be made there. It was on these implements that the invading trust hoped to make its profits.

materially reduced and that importers were carrying on competition on unfair lines, came to the conclusion that the complaint was well grounded, it could advise the Government to grant relief. If the New Zealand manufacturers agreed to reduce their prices for certain implements by at least 20 per cent., a countervailing tariff advantage might be recommended. The Commissioner has power to grant, on the recommendation of the board, bonuses up to 33 per cent., "as he deems necessary, to enable the local manufacturers to compete with the importers." To make the thing complete power is given to refund duty paid on any parts which are to be used by New Zealand manufacturers and which cannot be made advantageously in the Dominion. Finally, since the Act was directly aimed at an American trust, and since the spirit of Imperial preference was already abroad in the land, implements made in the United Kingdom were treated as if made in New Zealand.

What happened?

For two years there was a pregnant peace. Then in 1907 a complaint was filed with the board that drills, disc harrows, and cultivators of United States manufacture were being sold at greatly reduced prices, below those specified in the gazetted schedule. The board met, and discovered on investigation that the drills had been imported before the Act came into operation by a minor company whose rights had since been acquired by the trust. They were sold simply as old stock, to clear, and the board could not recommend that any protective action be taken. So far there has been no recurrence of undercutting.

Thus New Zealand has reached this singular position, that while the anti-trust Act preserves the *status quo* and eliminates undercutting, one of the few unprotected industries in the country is able to furnish agricultural implements to the farmers at prices ranging from 5 to 20 per cent. below those ruling in the protected market of Australia. The Australian manufacturers, moreover, pay lower wages than those of New Zealand. If the

experiment had been longer in force it might be possible to draw deductions. As it is, there is a possibility that the increased wages which are general throughout New Zealand may finally have their effect in this, as in other industries, and lead to a raising of the schedule prices of implements. It is hardly conceivable that the somewhat arbitrary fixing of the selling prices can survive the steady enhancement of the cost of production.

In another case the trust raised its head in a different form. It was a native-born monster, the most apt product of Protection. We have seen elsewhere how the protective tariff of Australia dealt a blow at New Zealand wheat-growing, and threw high and dry the over-capitalised industry of flour-milling. The millers entered into a mutual agreement with the avowed object of preventing cutting, and so making the best of the restricted local market. They had to earn interest on a plant that was now capable of fulfilling the requirements of the market thrice over. They were protected by the tariff, and before long the public came to the conclusion that they were being exploited. The Government thought so, at any rate, and it lost no time in bringing the guns of the Legislature to bear. This time, too, they proposed to use the customs tariff as the weapon, and to act upon the recommendation of a board of inquiry. The Arbitration Court was appointed to conduct the inquiry. If it found, upon a duly lodged complaint, that the price of flour was unreasonably high, it could recommend the Government to remit the protective duty, and so throw the market open to the levelling influence of Australian and American importations.

For its guidance the Court was instructed in the Act itself¹ that it was to consider the offence proved if the average price of flour in New Zealand should be relatively to the price of wheat in New Zealand higher than the average price of flour in Australia to the price of wheat there, "unless, in the opinion of the Court, the additional price is justified by the additional cost of pro-

¹ The Flour and Other Products Monopoly Prevention Act, 1907.



KAI KORAI WOOLLEN FACTORY, DUNEDIN.

duction." Wheat, to which the Act also applied, was to be considered unreasonably dear if, by any complete or partial monopoly, the price was higher than would be determined by unrestricted competition. The duty on both wheat and potatoes¹ can be removed if there is any evidence of a monopoly.

¹ The Act was extended to potatoes in consequence of a strong suspicion of cornering the short supplies in the seasons of 1904-6, when the crops were decimated by potato blight. In that period over £10,000 was paid in duty on imported potatoes.

CHAPTER XXIV

THE MAORI AS AN ECONOMIC FACTOR

Extinction of the race threatened—The Treaty of Waitangi—The pre-*pakeha* Maori—A change in the savage economy—Relapse into barbarism—*Pakeha* arts discarded—A native aristocracy—A national point of honour—A reign of aloofness—The influence of the “prophets”—The progressive Ngatiporou—A tribe of farmers—Successful co-operation—A domestic movement—The Hon. A. T. Ngata, M.P.—Carelessness and lack of system—The future of the Maori—Technical training—Arrest of the decline—The Maori and the land inseparable.

WHAT is one to say, in this year of grace 1909, of the Maori race as a factor in the economics of New Zealand?

A century ago it was easy enough to generalise. The Maori had just then become known to the Old World. His repute was that of a barbarian, chivalrous, it is true, but so confirmed and hopeless that he must needs, when once the Terror of Europe had been checked and conquered, fly, shrieking, into the Never Never, as the Aztecs and the Red Indians had gone, before the flashing sabres and resounding rifles of the European soldiery. Nobody, in the first days of the nineteenth century, ever expected that the Maori would live to see the dawn of the twentieth. Indeed, when the muskets of Te Rauparaha and Hongi laid waste the land and decimated whole tribes none dared hope that the remnant of the race would ever be strong enough to demand the justice due to a savage in the new dominion of the whites.

That wonderful instrument, the Treaty of Waitangi, was executed in a panic in 1840. To it succeeded years

of warfare between the ill-armed savage and the trained troops from Taku, Afghanistan, and the Punjab, and at the end of two decades the extinction of the Maori seemed certain to one of their best friends.¹ Yet to-day, according to a reliable enumeration, the Maori are twice as numerous as Judge Fenton expected them to be. The more closely one studies the history of New Zealand the more must he be astounded that a native race so handicapped by the division of their interests, so cut off from all help and sympathy, should have survived the lawlessness, the internecine slaughter, and the rapine of those long decades, and emerged an object-lesson to the world.

There is no need to follow the Maori through all their early vicissitudes. We have the turning-point of their history fixed at 1840. They were still a barbarous race : cannibalism was not yet extinct. But the forty years preceding the Treaty of Waitangi had wrought marked changes in the domestic economy of the native. In his pre-*pakeha* condition he had lived mainly on fish and roots. He had no animals ; he understood little of agriculture. He was not even a trader. All this had been changed by the influence of the whaler and the missionary. The native had now learned to require wheat and to grow it. He had a casual cow and horse and a multitude of pigs and dogs. He had learned to barter his flax and spars instead of giving them away. And he had learned to take guns in barter in preference to anything else, because they gave him a greater *mana* ² amongst the rival tribes. The Maori chiefs who signed the Treaty of Waitangi were not by any means ignorant, unsophisticated savages. If they had been united they could easily have dispensed with all necessity for making treaties with the intruding *pakeha*.

When the treaty did come along its effect was not immediate. If it had not been thought of the British

¹ Judge F. D. Fenton, who compiled the Maori statistical tables in 1859.

² Reputation, prestige, influence.

arms could scarcely have been put to it more severely to maintain the Queen's authority. The treaty had actually confirmed to the Maori the ownership of the whole of the land in the islands, but the native had not yet entered into the state of dignity which this secured for him. Henceforth every step in the settlement of the country was subject to purchases of land from the natives. The problem was not a pressing one at first, because the Maori far outnumbered the whites, and while this was so land had no particular value. The *pakeha* could easily secure all they desired from natives who were willing to sell their communal rights. Within twenty years, however, the white population counterbalanced the natives in numbers. The *pakeha* had a greater relative need for land than the Maori, though the Maori himself had now begun to see Western values and civilised utilities in virgin soil.

With the proclamation of British authority the inter-tribal wars ceased, and many of the tribes gave themselves up with enthusiasm to the pursuits of the *pakeha*. An air of peaceful industry succeeded to the bristling defiance of the pristine *pa*.¹ The natives grew splendid wheat crops, and ground the wheat into flour in their own mills. Their wives, too, evidenced in their clothing and their cookery the acquirement of many of the arts of civilisation. In both clothing and food the Maori began to make fresh demands upon the resources of his country. By the time of Judge Fenton's report there were very few of the tribes—chiefly the descendants of the original *tangata whenua*,² in the Urewera country—to whom the influence of civilisation had not in some degree penetrated.

But in reality it was not until long after the signing of the treaty that the native appeared as a problem inexorable in the path of progress. The treaty itself was largely responsible for the wars which set back for years the development of the fertile lands of the North Island,

¹ The fortified village.

² Original inhabitants : autochthones.

and afterwards held the Maori in sullen antagonism to the alienation of their lands. If we measured the native problem in New Zealand merely by the economic loss it entailed—the holding up of settlement, the expense and disquiet of protracted wars, the actual payment for the land itself (which rarely comes into the calculations of a conquering race)—then it would not be an inconsiderable problem. But its real significance came years later. It was not till long after the wars, when the Crown lands had almost all passed into the hands of settlers—from thick, impenetrable bush to rolling, sunny, grass-covered downs—that the presence of the native, even in a state of peace, came to be regarded as an obstacle to progress. By now the Maori had, to a large extent, abandoned again the arts of the earlier *pakeha* days. The orchards were neglected. The flour-mills rotted in idleness on the river banks. The flocks and herds wandered aimlessly in the scrub, breeding haphazard, degenerating and spreading noxious weeds broadcast with their own imperfections. The seed which had been sown at Waitangi was now bearing its fruit.

Political quarrels distracted some of the tribes, which eagerly arrayed themselves with their countrymen, or espoused the cause of the *pakeha* in the long succession of wars. To these succeeded the distractions of their own domestic politics. Many of the brightest intellects of the Maori race in the latter half of the century were unfortunately attracted away from their own immediate concerns to the national Parliament, in which, for forty years, the Maori party, consisting of four native members, has been little more than a name. Left thus practically leaderless, the Maori nation drifted aimlessly along, without incentive to work or to act for themselves. Maori politics were shaped almost entirely by *pakeha* minds. The native retreated absolutely to his *pas*, and a score would comprise the whole of the Maori who, during the last few decades, have gone abroad for purposes of education. The native ownership of land, respected by

the *pakeha*, served rather to maintain the Maori in easy circumstances, and to take away the incentive to work, than to encourage industry and thrift.

The treaty had, in fact, established a native landed aristocracy. Thousands of Maori, satisfying their modest wants on the rents paid to them by white men—run-holders at first, but later small settlers—were placed beyond that very necessity—hard work—which could be their only hope of ultimate salvation. The selective and sharpening influence of war and savage life was taken away. Existence called for no exertion. The race had its ears faced right down-hill. They were treated with every kindness, even with generosity. Since the ownership of land took away any stigma from a mixed alliance, they married on terms of equality into *pakeha* families. In hundreds of the best *pakeha* families in New Zealand there is a recognised strain of Maori blood. But there was a cardinal unkindness, an injury to the race, in the very treaty which relieved them of the invigorating necessity of entering into the battle for existence.

That the *pakeha* of New Zealand have never entertained the idea of renouncing the Treaty of Waitangi stands to their credit as a nation. The national honour of New Zealand has stood alone between the Maori race and utter extermination. As a business proposition the natives were for many years—and might even now be considered—a bad bargain. Although the rights granted by the treaty were so amplified in the New Zealand constitution as to rank the Maori as the absolute co-equal, civil and political, of the white, the native has never borne the same burdens, governmental and social. His lands are not taxed. He is under no obligation to incur the heavy local expenditure that progress forces on his white brother. In many cases he is free altogether of the expenses of local government. He stands on a footing with his *pakeha* fellows only in regard to taxation through the customs. It is because the absence of these burdens has removed all incentive to exertion that the

Maori people have enjoyed so much of the sympathy of the whites. The narrowest *pakeha* understands the dangers which confront the Maori race, and strong efforts have been made at different times to wean the Maori from the influence of their own *tohungas*¹ and wed them to European civilisation in all its activity and strenuousness.

As a rule the *mana* of one prophet has only died to make way for that of another. After the war in the Waikato the "King" movement there played upon the grievances of the natives against the *Kawanatanga*² and held them for years sullenly aloof from the march of progress. Governments which would gladly have done what was possible to assist the Maori to farm his own land had perforce to be content with purchasing what it could from the Maori and re-selling to the *pakeha*. Then came the cult of Te Whiti, which held a whole province spellbound for a generation. No sooner had this prophet died (November, 1907) than a new one arose counselling peaceful hostility to the progress of *pakeha* institutions.

One prophet taught that it was wicked to receive money from the *pakeha*, so his followers allowed their rent receipts to accrue steadily with the Public Trustee until the prophet died! This man, too, held it a mortal wickedness to build European houses, but a rival chief in the same village having erected one, he was compelled, for the sake of his *mana*, to do better, and before long the opposing factions, who were both strongly anti-*Kawanatanga*, were feverishly at work building house after house to rival the latest edifice of the opposing faction. Drainage and a water-supply followed, and Parihaka, the hotbed of savagery, became suddenly a model village. The two factions eventually combined to construct a fine metalled road into the village.

But every whim of the prophets did not end so happily. There was the "King," in the Waikato, to whom year after year homage was paid in kind and

¹ Prophets or priests.

² The Government.

cash from all parts of the country to perpetuate a propaganda of disaffection. There is now Rua, who has distracted the whole of the Bay of Plenty natives with his freaks and his quasi-Mormon religion. At his bidding hundreds of families left their homes, sold their horses, implements, and portable property, refused to work longer for Europeans, and went to live on the high ground to avoid the "Deluge" which he predicted would devastate the low land. Over and over again a cult of this sort, founded on a rude Christianity, has distracted the natives for a time and utterly impoverished them.

Here and there, on the other hand, a tribe or *hapu*¹ has broken away from the thralldom and started off in earnest pursuit of the *pakeha*. There were the Ngatiporou at the East Cape. They had not been much affected by the first wave of civilisation that came in the wake of the Queen's authority, and when they tried farming in the seventies it was a domestic movement, under no outside tutorage. They purchased sheep and turned them loose on the long, brown slopes of the East Coast, where the tussac and *toi toi* wave eternal in the Pacific breezes, where the green flax sedges the streams and the cabbage palms stand sentry on the hillsides. Scab was still rife amongst the flocks of New Zealand. The Maori neglected such necessary details as dipping and treating, and by and by the inexorable stock inspector ordered the destruction of the whole of the Maori flocks. Utterly discouraged, the Maori abandoned sheep-farming, let his land pass easily away to the *pakeha*, and feasted and made merry on the proceeds.

Ten years later the spirit took them again. There was a *pakeha* working sheep profitably in their midst. The Ngatiporou determined to try again on their own communal lands. One *hapu* accepted a scrub-cutting contract from a white settler, and purchased sheep with the proceeds. Another tribe which had collected money for the erection of a meeting-house bought sheep with

¹ Family : section of a tribe.



MAORI GIRLS COOKING IN STEAMHOLES, ROTORUA.

the surplus of £70. Gradually until 1898 the industry spread amongst the Maori. Lack of capital prompted the Ngatiporou to adopt a system of co-operation somewhat similar to that applied by the whites to dairying. This combined in an admirable manner the communism of the natives with the business methods of the *pakeha*. White capitalists were encouraged to lend the Maori money, and the experiment was altogether successful. There was no formal incorporation of the lands. The owners, who in some cases numbered hundreds, simply delegated the general management of the stations to committees and the detail work to managers. The European neighbours were in every case sympathetic and helpful. The Maori have been encouraged and liberally assisted, and since capital has been available their operations have expanded with great strides. In the last ten years the number of sheep has doubled. In a single county the Maori owners are actually working more than 50,000 acres of land, which carries 50,000 sheep and 2,000 cattle, besides innumerable horses. Here it is a family farm : there an individual one : again a co-operative holding upon which perhaps 200 of the 1,300 native owners reside, earning wages in the working of the property and sharing at the end of the financial year in the profits.

The rivalry that brought *pakeha* houses to Parihaka has brought the up-to-date woolshed and the Wolseley shearing machine to dozens of Maori stations on the East Coast. In the Waiapu county the Maori have, on their own initiative, cleared 60,000 acres of bush land, and they possess 90,000 sheep, 3,500 head of cattle, 8,200 pigs, and hundreds of horses. There are fourteen up-to-date woolsheds and hundreds of miles of private telephone line connecting the outlying stations. The same progressive spirit is apparent in all the affairs of the East Coast Maori. One village was refused its petition for a native school. The Maori immediately collected £200, and offered this as a subsidy in repeating the request. The school is now in operation. The East Coast natives

are now turning their attention to the erection of hostels and nursing homes to assist the district health officers in the important duty of tending the sick Maori and instructing the race in the fundamental rules of hygiene.

The significance of all this activity on the part of the East Cape Maori rests in the fact that the movement originated with themselves. One of their number, Apirana Turupa Ngata,¹ did what many a young Maori has done in graduating from a native school to Te Aute College—a secondary institution for Maori pupils; what fewer have done, in passing from Te Aute to the University of New Zealand; and what an infinitesimal number have done, in throwing the whole of his education, his restless energy, and his organising ability into the work of promoting the welfare of his own people. Though not the originator of the progress of the East Cape Maori, Mr. Ngata has for years been the heart and soul of the progressive movement which has at length indicated to the sympathetic white population a means of permanently establishing the Maori as an economic entity in New Zealand.

The experiments at East Cape affect only a small proportion of the Maori population. Elsewhere, with greater advantages and closer contact with Europeans, the results have been far less encouraging. Until last year Te Whiti-ism held the natives of the Taranaki Province aloof from the pursuits of the *pakeha*. On the Whanganui River, again, where lived some of the most

¹ The Hon. A. T. Ngata was born at Te Araroa in 1874, educated in the native school at Waiomatatini, Te Aute College, and Canterbury College (University of New Zealand); B.A., 1893; runner-up in political science scholarship; articulated to law; M.A., 1894; LL.B., 1896; admitted to Bar, 1897; organising secretary in 1899 of the Young Maori Party, which aims at the regeneration of the race through education, sanitary science, and industry; organising inspector of Maori Councils, 1902-4; Member of Parliament for Eastern Maori since 1905; member of three Royal Commissions on native matters, 1905-9; secretary to Maori Congress, 1907-8; member of executive representing native race, 1909. Another educated Maori, Dr. Pomare, is Chief Native Health Officer; and a third, Dr. Te Rangihiroa (Assistant Native Health Officer), has just been elected to represent the Northern Maori in Parliament.

illustrious and powerful tribes of the pre-*pakeha* days, the flour-mills of the early civilised era have been abandoned to ruin, the wide wheat-fields have gone back to scrub and fern. Agriculture and enterprise are for the moment dead. In the King Country, too, which lies vaguely in the middle of the North Island, the influence of the "Kings" has been all against progress. But the natives everywhere keep some European stock, and three-fourths of the butter-fat received at the central dairy factory at Te Kuiti is the produce of Maori-owned cows. Sheep-farming amongst the Ngati-maniapoto is elementary and crude, because European sheep-owners, who are essential as pacemakers to the Maori, have scarcely yet overcome the native fern of the Waikato hills.

The East Coast experiment has, however, amply proved the possibility of making the Maori a farming people on business lines, and so wedding them to the soil in practice as they are already wedded in traditional ownership. Judge Sim, of the Native Land Court, has voiced the belief of most students of the Maori in these words:—

"I do not think any attempt to sever the Maori from his land will result in success. His only chance lies in being encouraged and taught to utilise his land."

Hitherto the chief complaint against the natives is that they never have "utilised" the land which is secured by the treaty against occupation by the *pakeha*. The *kainga*¹ itself may happen to be fenced and kept tidy; but it is probably not, for the common ownership of land regards the fence as a public offence. Close at hand, too, there is another fence of sorts to keep the roving communistic pig out of the patch of oats, necessary to keep together the body and soul of the charger upon which the young Maori blood ranges the country-side. The maize plot, as well, must be protected against the ravages of the animals of the *kainga*, because it furnishes one of the most cherished foodstuffs of the Maori. Apart from this the tribal lands are generally neglected. Horses, cattle, and sheep wander about at their sweet will; fern, scrub, and

¹ Village.

noxious weeds spread everywhere. The last state of the land is no better than the first.

For lack of system the communistic Maori is shut out of many markets. His grain is dirty with weeds. His potatoes are ravaged by blight. His milk is rejected at the factory because the *pa* pigs are allowed to wallow in the water supply. His cattle are tuberculous. His horses have ringbones, sidebones, and all the blemishes of hard riding. His stock generally is inbred and weak. What does it matter, so that he has enough to live on? There are rents coming in every half-year from the *pakeha* sections on the river. There is money from the sale of some new block to the Government. There is the billiard-room at the cross-roads. And, after all, if everything fails, the *Kawanatanga* will send potatoes and flour for the winter. "*Ka pai!*" ("It is good.")

The question of the ultimate position of the Maori race had engaged students for many years, but it only became a serious one when, by the advance of European settlement, it became necessary to make further inroads on the area of land remaining in possession of the natives. That area is now greatly in excess of the actual requirements of the natives, and if it is not turned to proper account and made to produce wealth and bear its burdens with the European lands, it is questionable whether public opinion will much longer tolerate its locking-up. Should the Maori fail to proceed now to a practical possession of his lands the time must come when the legal processes which exist will be used to despoil him of it. And that simply means, to all who know native races, that from a landed aristocracy the Maori will become a proletariat of paupers. There are few in New Zealand who believe that public opinion will ever force the position so ruthlessly. The incidents of the Maori transition to industrialism, which have already been referred to, are an earnest of what is possible with the race. In a memorial on the subject two years ago a Royal Commission, consisting of the Chief Justice (Sir Robert Stout) and Mr. Ngata, asked:—

"What is to become of the Maori people? Is the race to pass away entirely? . . . If it is considered that half a century ago the race were living as cannibals the immense development of the Maori people must surprise every one. The race is worth saving, and the duty and burden of preserving the race rests with the people of New Zealand. The Maori, we believe, can not only be preserved, but also become active, energetic, thrifty, industrious citizens. On the East Coast of the North Island there are Maori communities just as well-behaved and just as industrious as European settlers. . . . To our minds, what is now the paramount consideration is the encouragement and training of the Maori to become industrious settlers. The necessity of assisting the Maori to settle his own lands was never properly recognised (by legislation). . . . The spectacle is presented to us of a people starving in the midst of plenty. If it is difficult for the European to acquire Maori land owing to complications of title, it is more difficult for the individual Maori owner to acquire his own land, be he ever so ambitious and capable of using it. And when he has succeeded he is handicapped by want of capital, by lack of training—he is under the ban as one of a spendthrift, easy-going, improvident people."

That Commission came to the conclusion that the Maori would have no chance unless he received a more technical education than he had had in the past. "It cannot be expected," the report remarked, "that he can equal a race that has been farming for thousands of years whilst his race has only been engaged in what may be termed hunting and in the culture of small garden patches." The traditional ownership of Maori land is communal. Every acre has a multiplicity of owners, probably a dozen, but possibly a score or many hundreds. To individualise the land would not only be difficult, it would be grossly unfair to a people who do not live as individualists. Consequently the working of farms on the co-operative system adopted

on the East Coast seems to be the most equitable course to follow. All the details of the farming are decided by a competent manager, who receives a salary.

Within the last few years the working of land so incorporated has spread from the East Coast to the Whanganui River, but no results have yet been achieved in the latter locality. The outlook for the Maori is critical, but it is abundantly hopeful. The ownership of land has given the Maori a dignity which no other dark race has ever enjoyed in a country dominated by whites. The Maori has the hearty sympathy of the *pakeha*, whose equal he is in politics and in fact. This equality is only varied according to the moral character of the individual. Though the Maori, as a race, have yet to justify themselves in the industrial sphere, it is generally recognised to-day that the extinction of the race will be by absorption and not by extermination.

Judge Fenton, who was very closely informed, predicted in 1859 that the race would decline according to the first column in the subjoined table. The actual census figures (which at every succeeding period are more accurate) are stated in the second column :—

			Fenton's Table.				Census Result.
1858	...	...	56,049	1858	...	...	56,049
1872	...	...	45,164	1874	...	...	45,470
1886	...	...	36,393	1886	...	...	41,969
1900	...	...	29,325	1901	...	...	43,143
1914	...	...	23,630	1906	...	...	47,731
1956	...	...	12,364				

The census on which Judge Fenton based his calculation was the first at which an equilibrium was established between the white and the dark population. At present the total population of New Zealand is just over one million, and only 5 per cent. are Maori. There are besides many half-casts, descended from marriages of a European and a Maori. In some districts the pale, brownish skin, dark, wavy hair, and slightly broadened

features of the mixed race are quite common, and the effect of the admixture on the race as a whole is not inconsiderable.

As a problem affecting the peace of the country the Maori have long since ceased to be an element of danger. For thirty years the races have lived on terms of complete amity. On the other hand, the peculiar conditions surrounding the economy of the Maori themselves have placed them in a position of much greater importance than their numbers warrant. The subjoined table only partially represents the inequality of the position, inasmuch as the Maori land escapes the graduated taxation, and the Maori themselves, owing to their semi-civilised manner of life, pay much less than the *pakeha* in indirect taxation through the customs :—

	Population at Census, 1906.	Area of Land in Possession of.	Average per Head.
Whites ...	908,726	37,564,288 acres	41 acres
Maori... ..	47,731	7,445,000 ¹ „	155 „

Much of the native land is, of course, of very poor quality, similar to a large area of the unoccupied Crown lands. On the whole, it is inferior in quality to the occupied European lands.

Separated from their lands, there would be no prospect whatever for the Maori. They have little mechanical aptitude, and any attempt to utilise them in mechanical industries would be foredoomed to failure. Their whole disposition is naturally towards an open-air life. They make expert bushmen, flaxmill hands, and shearers, and if the necessity for work could be forced upon them they would undoubtedly become once more as fine sailors as their forefathers were. But the regeneration of the Maori, if it is ever accomplished, will be through their development as agriculturists and graziers. That is the only way in which they will be able to utilise the one weapon which they possess in competition with the whites.

¹ Exclusive of the South Island, where the area is considerable.

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O C E A N

DOMINION OF NEW ZEALAND

TO ACCOMPANY
"NEW ZEALAND IN EVOLUTION"
By G. H. SCHOLEFIELD

London: T. Fisher Unwin

SCALES

Natural Scale 1 3350000 = 53 miles to an inch

Geographical Miles 60 = 1 degree

English Statute Miles 69.16 = 1 degree

Kilometres 111.3 = 1 degree

Railways thus ———

Heights in English feet

Submarine Telegraph lines shewn thus ———

